

# COLLABORATIVE STUDY ON THE PHENOMENOLOGY AND NATURAL HISTORY OF ACUTE PSYCHOSIS



**INDIAN COUNCIL OF MEDICAL RESEARCH  
NEW DELHI  
1989**

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e-mail : chc@sochara.org

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HISTORY OF ACUTE PSYCHOSIS  
PHENOMENOLOGY AND NATURAL  
COLLABORATIVE STUDY ON THE



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## A Collaborate Study on the Phenomenology and Natural History of Acute Psychosis

### Centres and Investigators :

(a) Govt. Medical College, Patiala  
(Co-ordinating centre)

Dr. Gurmeet Singh,  
Professor of Psychiatry.

(b) S.P. Medical College,  
Bikaner

Dr. L.N. Gupta,  
Lecturer in Psychiatry.

(c) Institute of Psychiatry & Medical  
College, Goa

Dr. A. Kala,  
Assistant Professor of Psychiatry,  
uptill—March 1983.

Dr. J.M. Fernandes,  
Asstt. Professor of Psychiatry  
from April 1983.

(d) Christian Medical College, Vellore

Dr. K. Kuruvilla,  
Professor of Psychiatry

### Consultants :

(a) Dr. N.N. Wig

Professor of Psychiatry,  
All India Institute of Medical  
Sciences, New Delhi.  
Presently W.H.O. Regional Adviser,  
Eastern Mediterranean, Alexandria.

(b) Dr. B.B. Sethi

Professor of Psychiatry,  
K.G. Medical College,  
Lucknow.

### I.C.M.R. Co-ordinating Unit :

Dr. Usha K. Luthra  
Mr. A.K. Prabhakar  
Dr. Narender Kumar  
Dr. Rashmi Parbee  
Dr. D.K. Menon  
Mr. D.K. Shukla

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## FOREWORD

Since the time of Kraepelin, the psychotic disorders have been divided into the two main categories—the schizophrenia and manic-depression disorders. Subsequently, several workers from different parts of the world noted the presence of some cases who did not precisely fall into either of these two categories. Further such cases were seen more commonly by psychiatrists in India, and other Afro-Asian countries. The ICMR undertook a multicentric study at Bikaner, Goa, Patiala and Vellore during 1981-84 to study whether Acute Psychosis is a unitary entity and to study its phenomenology, natural history, course and outcome and prognostic indicators.

The study included 323 cases of sudden onset of psychotic symptoms with development of full blown psychosis within days, upto a maximum of 2 weeks. The cases were followed for a minimum of one year period. It was found that there were three main categories of patients (a) cases diagnosed as schizophrenia by I.C.D.-9 criteria as well as by the computer aided method CATEGO, (b) cases diagnosed manic depressive psychosis by ICD-9 criteria as well as by CATEGO method, (c) remaining 161 cases which could not be classified as schizophrenia or MDP clinically and also could not be classified into any clear cut diagnostic category by CATEGO method. These 161 cases formed the core group of acute psychosis which differed from clear cut schizophrenia and MDP cases in a number of characteristics. The core group had a better outcome showing full recovery with no relapse in 85 % cases as compared to 68 % among the remaining cases. These patients did not show the symptoms of anxiety or perplexity etc. which were associated with poor outcome. Some of these patients who had not received any medical treatment also showed good outcome suggesting that they may be a benign self limiting condition which is triggered by a psychological (78 out of 161 cases) or physiological or somatic stress (22 out of 161 cases).

This project also developed purely descriptive categories for acute psychosis which are based on predominant clinical manifestation of the patients at the time of initial contact, that is, during the full blown acute psychosis. These descriptive categories were easy to use with a fairly high degree of reliability. Almost 50 % cases fell into only 2 categories—predominantly paranoid and predominantly excited categories.

If PHC doctors are trained in identification and management of cases of acute psychosis, this will help in providing mental health care and management of such cases in the community. It is hoped that this project will provide a better understanding of acute psychotic disorder in India.

USHA K. LUTHRA  
*Addl. Director-General*

## PREFACE

Clinical experience has shown that some patients with acute onset of illness have a better outcome. These cases often present with florid symptoms and grossly disturbed behaviour and they do not precisely fall in the diagnostic categories of schizophrenia or manic depressive psychosis. The International Pilot study of schizophrenia reported that this acute illness with full remissions were more frequently seen in Africa and India as compared to western countries. This suggested that perhaps the acute psychosis cases being seen in India were not typical of the western concept of schizophrenia but could be a variant of schizophrenia or manic depressive psychosis, or perhaps a benign acute psychotic illness with good outcome and not hitherto recognized as a separate entity. The Indian Council of Medical Research commissioned a collaborative project at four centres (Bikaner, Goa, Patiala and Vellore) to examine these issues and to study the outcome of such cases.

This prospective clinical study included 323 cases as per the inclusion and exclusion criteria defined for the project. In view of the difficulty of assigning cases of acute psychosis on the basis of presenting clinical picture into the existing ICD-9 diagnostic categories, the project team developed a set of 10 purely descriptive categories for classification of cases. In addition to ICD-9 criteria and descriptive categories a computer aided method CATEGO was also used for classification of patients.

The study demonstrated that there is a group of patients with a very acute onset of illness, which differs from the two established categories of schizophrenia and manic depressive psychosis on the basis of their clinical picture, normal premorbid personality, absence of family history of mental illness and an excellent recovery rate, suggesting that this may be a benign type of acute psychosis which is triggered off by some psychological or physiological stress and which tends to recover rapidly within matter of weeks or months, without any residual symptoms. The fact that such cases seem to occur more in the Afro-Asian countries suggests that there may be important social and cultural influences which predispose to this type of illness and which should form the basis of future research into the possible etiological factors of this acute onset disorder.

The spirit of collaboration which was so very important for undertaking a project of this type continued as an essential factor till completion of the project. Each important decision was reached after consultations among all investigators, consultants and associated ICMR scientists. It is hoped that this study will help in better understanding of acute psychosis as it is seen in our country.

GURMEET SINGH  
*Co-ordinator*

## Introduction

In discussing the course and outcome of Schizophrenia, reference is often made to the fact that acute episodes of relatively short duration and without any subsequent social disability are apparently much commoner in some countries than in others. In the WHO International follow-up study of Schizophrenia (WHO, 1979), it was reported that single episodes with full remission were more frequent in Nigeria and India (58 per cent and 51 per cent respectively) whereas a chronic progressive course was more frequent in USA and Denmark (47 - 48 per cent) whereas in some countries, e.g. USSR and Columbia, the majority experience brief relapses (42 per cent and 39 per cent respectively). The WHO team suggested that they may be dealing with three different Schizophrenias exhibiting different courses rather than a single entity. Further in the same study, (using the PSE at intake) 52 out of a total of 1202 cases were labelled by the local psychiatrists as falling into a category other than Schizophrenia and affective psychosis i.e. other psychosis (ICD-8 Code No. 298). With more uniform criteria applied to such cases, perhaps their number would have been much higher than the estimated 5 per cent in the above sample. This is reinforced when we look at the figures from certain societies e.g. Senegal (Collomb, 1965) and Astrakhan (Skliar and Starikova, 1929) in which such acute psychosis are reported to be twice as frequent as Schizophrenia, and other societies in which a majority of cases labelled as acute schizophrenia might equally have fitted in this category (Murphy, 1982).

## Review of Literature

Temporary insanity has been regularly depicted throughout Western literature and was described as generally developing as a result of emotional shock or God's curse. Prior to the nineteenth century, such acute insanities whether due to emotional trauma or to inter-current fever or other illness were frequently labelled as "phrenitis" i.e. brain fever but figures regarding the stay of patients in mental hospitals do suggest that such acute transient psychoses were certainly more common in the early eighteenth and nineteenth centuries than they were towards the end of the nineteenth century. During that period, they were given a variety of names, by different workers, one authority cited by Ey (1954) listed 20 such terms in use in 1886. This abundance of terms would suggest not only the lack of any clearly defined criteria but more likely reflected the wide variation in their presenting clinical picture. In the French literature the term 'Bouffee delirante' was introduced by Magnan and he further divided them into three broad categories.

- (a) Predominantly affective
- (b) Predominantly confusional or commence with hallucinations
- (c) Commence with delusions

Broadly speaking, the diagnosis of 'Bouffee delirante' was based on the following criteria (Constant, 1969; Ey, 1958).

1. Acuteness of onset.
2. Kaleidoscopic shifting from one mental state to another, both at the ideational and emotional level, without consistency of delusional content.
3. Intensity of the delusional and hallucinatory experience.
4. Fascination of the patient by his delusional experiences.
5. Termination of the episode and return to the premorbid state within a short period (generally within 3 months) but not necessarily without later relapses.

Acute Transient Psychoses were by and large ignored by the British, German and American Psychiatrists. British Psychiatry was obliged to take note of these because of the frequency with which transient psychoses occurred among Indian and African soldiers during the war but tended to follow the German Organic School in seizing on any inter-current somatic illness as the possible cause and labelled most of them as Toxic Psychoses under the influence of Overback Wright (1921). In America, after a small period when, following Adolf-Meyers theory, all psychoses were referred to as 'reactions', the majority seized on Bleuler's claim that the "Group of Schizophrenias" could embrace acute, transient

as well as chronic disorders and have tended to apply the term 'Schizophrenia' to them ever since. Only in Scandinavia, was there a serious attempt to distinguish the transient, reactive "Psychogenic Psychoses" from the chronic varieties following the lead of Wimmer (1916) and, unlike the French concept of 'Bouffée Delirante' as revised by Ey (1954) who put great emphasis on the presenting clinical picture rather than the subsequent course, the Scandinavian concept, although implying the presence of a precipitatory stress, put more emphasis on the course and outcome rather than the presenting clinical picture, so that when a case subsequently developed a more chronic course, it was assumed that the original 'psychogenic psychosis' diagnosis was wrong.

Jaspers, in 1913, recognised the syndrome of 'Reactive Psychosis'. The criteria for determining the reactive nature of the psychosis were :

1. Close association with stress,
2. Understandability of the symptoms in terms of the stress,
3. The psychosis serves a purpose e.g. a wish fulfilment or an escape from the stress and
4. Termination of the psychosis with the termination of the stress.

Faergman (1963) and McCabe (1975) have carried out long term studies of patients diagnosed as suffering from Reactive Psychoses and found them to have the following characteristics in common.

- (a) An abnormal premorbid personality with high degree of sensitivity, immaturity and lack of confidence.
- (b) An acute breakdown.
- (c) Florid emotional symptoms.
- (d) Absence of autistic features.
- (e) Short duration of illness with a good prognosis.

Lambo (1965) also mentioned that high emotional liability was a special feature of the psychotic disorders of acute onset which he came across in Nigeria. In India, Wig and Singh (1967) also pointed to the acute psychoses of uncertain origin as being different from the clear cut manic-depressive or schizophrenic psychoses, and apart from the acute onset, were characterised by florid symptomatology and good prognosis.

There seems to be a marked similarity in the description of the earlier 'Bouffée delirante', the psychogenic psychosis, reactive psychosis and the acute psychosis of uncertain etiology, although Kapur and Pandurangi (1979), in a comparative study of Reactive Psychosis and Acute Psychosis without precipitating stress, concluded that the two group of patients appeared to be independent entities on a number of variables—the reactives

psychoses being more akin to the affective psychoses while the acute psychoses without precipitating stress were more akin to schizophrenia.

Several other workers have also commented on the presence of such atypical psychoses which do not clearly fit into either the Schizophrenia or Affective Psychosis categories, and have suggested different names for them such as Schizoaffective Psychosis (Kasanin, 1933), Schizophreniform Psychosis (Langfeldt, 1937), Cycloid Psychosis (Leonhard, 1961), Atypical Psychosis (Mitusda, 1965), and Reactive or good prognosis Schizophrenia (McCabe et al., 1972 and McCabe and Strogren, 1975). Langfeldt suggested a subdivision within the group of Schizophrenias—those with the classical picture of dementia praecox with a chronic course and a poor prognosis be called 'true' or process Schizophrenias, while those with psychotic episodes of sudden onset, usually in response to a precipitating factor and with an admixture of manic-depressive and confusional symptoms and a good prognosis be termed 'Schizophreniform' psychosis. Similarly in contrast to the 'nuclear' schizophrenia, Kasanin (1933) described an acute psychosis with marked affective symptoms, occurring in previously well integrated individuals, and in the presence of definite environmental stress, generally followed by remissions or full recovery. This relatively benign psychosis is obviously an atypical psychosis with a clinical course similar to the affective disorders, nevertheless, Kasanin does not hesitate to ascribe it to the Schizophrenic group. In fact it has found its way into the official classification as a subtype of Schizophrenia (I.C.D.-9, 295.7).

Pope and Lipinski (1978) in their review of the subject conclude that in the present state of knowledge, there are no known pathognomic symptoms of schizophrenia, nor even any cluster of symptoms, taken in cross section, as yet adequately demonstrated to be valid in diagnosing schizophrenia. Furthermore, classical schizophrenic symptoms and Schneider's first rank symptoms are reported in 20 per cent to 50 per cent of well validated cases of Manic-Depressive Psychoses, thus stressing the non-specificity of the so-called 'schizophrenic' symptoms.

In the course of clinical and follow-up studies of these atypical psychoses as compared with manic-depressive psychoses and schizophrenia, Singh and Sachdeva (1980 and 1982) found that on the basis of clinical picture, family history, response to treatment and outcome on follow up, the group of schizo-affective psychoses showed marked differences from the group of schizophrenic patients and in many respects, were more closely related to affective psychoses. In another study of patients diagnosed as suffering from an 'acute schizophrenic episode', their finding again did not justify their classification as a subtype of schizophrenia. On all the studied variables, these patients were significantly different from, and in some respects, tended to fall in between the cases of 'pure' Schizophrenia and manic-depressive Psychoses, thereby suggesting that they might be a third independent psychoses. In a similar study on DSM-III, 'Schizophreniform disorder', Fogelson et al (1982) conclude that these patients even though presenting no depressive psychotic features—on the basis of family history, past history, response to Lithium and antidepressants or phenothiazines and outcome, may be an atypical manifestation of affective disorder or

perhaps a separate intermediate category between the 'pure' affective psychoses and 'true' schizophrenia. Hence it is of utmost importance to determine the nature of acute, atypical psychoses, since according to the existing classification, most of them get labelled as 'acute schizophrenic episodes' or 'Schizo-affective psychoses' (and occasionally under manic-depressive psychoses manic type), with the result that they may be unnecessarily exposed to long term neuroleptic medication with its attendant adverse side effects. Further, any research on schizophrenia which includes such cases is likely to be strongly biased towards a better prognosis than a sample consisting of only 'process schizophrenia'. In fact, Pope and Lipinski (1978), in their review estimate that most studies on Schizophrenia are contaminated with upto 40 per cent cases of affective psychoses.

It is thus evident that the acute psychoses are present in almost all societies studied although their incidence varies markedly from one society to another. If we had a more uniform way of identifying and classifying these psychoses, it is probable that the international and cross-cultural variation would be much more evident than it is at present, although some of the apparent cross-cultural variations in schizophrenia might thereby be reduced. It is possible to view these as essentially different diseases some of which might be culture bound or we can regard them as essentially the same disease with a strong pathoplastic element. Based on the observation that acute reactive psychoses are almost certainly rare in those societies which put a high emphasis on independence and individualisation as opposed to those with a tendency of dependence on others and also the finding that the psychosis seem to occur more in societies with limited formal education, Murphy (1982) suggests that an important social predisposing factor may be separation from the community on which dependency is focussed. In addition to these social factors, the nature of the precipitating stress, family history and somatic influences may also be of importance in determining the onset of acute psychotic illness.

## AIMS OF THE PRESENT STUDY

1. To study the phenomenology, natural history, sociodemographic correlates, family history, response to treatment, long term outcome and prognostic indicators of cases of Acute Psychosis.
2. To study whether acute psychosis is a unitary, hitherto unrecognised disease entity or made up of a heterogenous group of disorders, and if so whether it is possible to clearly define a separate Acute Psychosis as distinct from Schizophrenia or affective illness.

## STUDY DESIGN

This was a prospective, multicentered project. For the purpose of the present study, acute psychosis has been operationally defined—the inclusion criteria being:

1. Age of the patient between 15-60 years.
2. Sudden onset of psychotic symptoms. Development of full blown psychosis within days, upto a maximum of 2 weeks.

3. Contact with the clinic within 4 weeks of onset of the psychotic symptoms.

4. Presence of any two of the following features:

- (i) Delusions (any context)
- (ii) Hallucinations (any modality)
- (iii) Confusion or disorientation
- (iv) Grossly inappropriate or socially undesirable behaviour
- (v) Marked excitement
- (vi) Marked withdrawal
- (vii) Marked elation
- (viii) Marked depression.

The presence of delusion or hallucination alone would also qualify for inclusion as a case. Each of the above items was operationally defined and a glossary prepared for this purpose (See appendix).

Exclusion criteria were:

- (i) Gross organic brain disorder.
- (ii) Epilepsy.
- (iii) Mental retardation.
- (iv) History of previous episode of psychotic illness.
- (v) Patient has been on continuous anti-psychotic treatment for more than one week immediately prior to contact with clinic.
- (vi) Residence beyond a defined catchment area. This was done keeping in view the feasibility of adequate follow up so as to keep the loss of cases due to drop out to a minimum.

## Material and Methods

The present study was a prospective clinical study of patients suffering from an acute psychotic illness and who were brought for treatment to the psychiatric department of the Medical College at the following four centres—Patiala, Bikaner, Goa and Vellore (Appendix I). The study was conducted in three phases.

### A. Preparatory phase

During this phase the main tasks were:-

- (a) the development and testing of various instruments to be used in the study ;
- (b) training of research staff in the use of these instruments and carrying reliability exercises ; and
- (c) to study the feasibility of carrying out the study and defining the catchment area for each centre.

Instruments used in the study:

(1) *Screening proforma* ; Section A of SCAAPS was modified and developed as a separate screening instrument (Appendix II). This was to be administered to all cases of psychosis registering at the four centres, and only those cases fulfilling the inclusion and exclusion criteria—which were operationally defined (Appendix III) were to be provisionally included in the study. A final decision on inclusion of a case was to be made at the end of 1 week taking into consideration any further information obtained from the patient or his relatives during this period. This instrument was pretested on 10 patients at each centre and then intercentre reliability was checked by the co-ordinator sending six case summaries to be scored on the screening proforma and returned to the co-ordinating centre. The responses showed a high level of agreement.

(2) *SCAAPS*—Schedule for the Clinical Assessment of Acute Psychotic States : This instrument was developed by the World Health Organization for use in their studies. It was used with certain minor modifications and after obtaining the permission of W.H.O. The modified SCAAPS as used in the present study consists of five parts (see Appendix IV).

*Part B Psychiatric History and Social Description* ; This consists of 14 items designed to elicit the psychiatric history including the premorbid personality, onset of illness, presence or absence of previous episode of illness, presence or absence of stressful events both physical and psychological, history of drug and alcohol abuse, family history of mental illness and his membership of any socially or culturally identifiable minority group. This section was used as such with the addition of the following four items:

- (a) Religion
- (b) Caste
- (c) Occupation
- (d) State of origin

*Part C Symptom check list* ; This includes almost all the symptoms of PSE under 19 sub headings. Each item on SCAPPS is identified with the appropriate number of PSE.

The original 5 columns in Part C, relating to the times of mental state assessment were replaced by 11 columns as follows:

- (i) Mental state assessment at any time in the two weeks prior to the initial contact as obtained from the history given by the patient or his relative.
- (ii) Initial Assessment-within 48 hours of the initial contact.
- (iii) to (viii) At weekly intervals for 6 weeks.
- (ix) At 3 months
- (x) At 6 months
- (xi) At one year

#### **Part D Initial Assessment and Diagnostic Evaluation**

The investigator is required to fill in the main diagnosis and supplementary diagnosis if necessary and to rank the probability of diagnosis.

- (a) In addition to the I.C.D.-9 diagnosis, each case was also classified under the I.C.M.R. descriptive diagnostic categories specifically designed for this study.
- (b) In addition, every case was also classified under one of three heads i.e. Reactive, Probably reactive or Non-reactive according to specified criteria.
- (c) Instead of two evaluations, i.e. initial and at one year in the original SCAPPS, it was decided to have an additional diagnostic evaluation at 6 weeks i.e. after the patient had received initial treatment and was under observation for a period of 6 weeks.
- (d) Sections Dz and Dy of original Scaaps have not been used.

*Part E Treatment Course and Outcome* ; It consists of 7 headings in which the nature of treatment given is to be specified at 3 months and 1 year time period as also the total duration of treatment and whether the patient has achieved full remission or not. The occurrence of relapse during the one year follow up period and the patient's social level of functioning at 3 months and one year was recorded.

- (a) Under the treatment given, only four headings were retained i.e. (i) Neuroleptics, (ii) Antidepressants, (iii) E.C.T., (iv) Other psychoactive agents (to be specified).
- (b) Instead of two follow-up assessments i.e. at 3 months and one year in the original Scaaps, in this study complete follow-up assessments were made at 3 time periods i.e. 3 months, 6 months and 1 year.

*Part F.* This includes the writing up of a brief narrative summary describing the relevant features of the patient's mental state and was also done at those points of time i.e. (a) at initial examination (b) at 3 months and (c) at one year.

### (3) P.S.E.

The present State Examination—9th edition (Wingh Cooper and Sartorius, 1974)—Hindi Translation developed by W.H.O. Collaborating Centre, P.G.I., Chandigarh, was used after suitable training in the use of P.S.E. was imparted at a workshop conducted by one of the consultants (Prof. N.N. Wig) for all the investigators and research officers. The inter-investigator reliability was carried out and found to be good (See appendix VI). The combined overall agreements on the P.S.E. among the Chief Investigators i.e. crude index of agreement was found to be 93.33 per cent and that between Research Officers and Chief Investigators was 88 per cent and the agreement index between Research Officers was 89.88 per cent.

### (4) Descriptive diagnostic categories

In view of the difficulty of assigning cases of Acute Psychosis on the basis of presenting clinical picture into the existing I.C.D.-9 diagnostic categories, it was decided to develop a purely descriptive diagnostic classification—depending entirely on the predominant clinical manifestation of the patient at the time of the initial contact i.e. during the full blown Acute Psychosis. Ten categories were developed to cover the range of observed behaviour in such cases and each category was operationally defined. These are as follows:

#### (Appendix VII)

- (1) Predominantly depressed type;
- (2) Predominantly elated type;
- (3) Predominantly withdrawn type;
- (4) Predominantly excited type;
- (5) Predominantly paranoid type;
- (6) Predominantly confused type;
- (7) Predominantly hysterical type;
- (8) Predominantly possession type;

- (9) Mixed type;
- (10) Others.

An intercentre reliability exercise was carried out on a series of 20 cases summaries circulated to all centres and the Chief Investigators and Research Officers were required to independently classify them according to both the I.C.M.R. and I.C.D. 9 diagnostic categories. The results showed a high degree of intercentre reliability in the use of the I.C.M.R. diagnostic categories (See Appendix VIII).

#### **(5) Time table of activities checklist**

To ensure that all the tasks were completed at the designated times during the initial admission and during the follow up period, a time table of activities check list was prepared and fixed on the front page of each patient's file. Before starting the actual intake phase, each centre prepared a feasibility report and a centre specific research protocol. Keeping the local conditions in mind, a specific catchment area was defined for each centre (Appendix IX). Limiting the patients to be taken up for the study to only residents of this catchment area was considered necessary for easy accessibility during follow up visits as also to keep the drop out rate to a minimum.

#### **B. Intaken phase**

All patients of psychosis attending the outpatient or inpatient units of the four centres over a period of 1 year i.e. from January to December 31, 1982, were administered the screening proforma by the research officers. All those patients who fulfilled the inclusion and exclusion criteria were provisionally taken up for the study and immediately admitted to the hospital. All patients remained in hospital for a period of six weeks, but not less than four weeks even in cases where full recovery had occurred earlier. On admission, a detailed history was obtained from the patient and his accompanying relative, in addition to the detailed mental state examination, SCAAPS was completed within 48 hours of admission and the P.S.E. was administered by the research officer within seven days of initial contact. Every fifth case was jointly interviewed, using the P.S.E., by the research officer and the Chief investigator at each centre. The P.S.E. was also completed at the end of 1 year of follow up. Repeat assessments on part C of SCAAPS (the symptom check list) were made at weekly intervals for the first six weeks, and then at 3 months, 6 months, and 1 year from the time of initial contact.

Each patient was given a diagnosis both according to ICD 9 as well as the ICMR descriptive diagnostic categories. In addition all cases were labelled as either reactive, possibly reactive or not reactive.

Initially all patients were treated by either neuroleptics or antidepressants according to the diagnosis made by the Chief Investigators. In cases where the patient did not show any improvement, the investigators were free to change the medicine or initiate electro convulsive

therapy. No other active drugs were normally used, except for use of minor tranquillizers as hypnotics and whenever used, this fact was noted in part E of SCAAPS. Patients were taken off all drugs as soon as they were symptom free, and no maintenance drugs were given, except in cases who had a relapse on discontinuing the treatment.

All cases who were not available for assessment at any time during the 1 year follow up period, for any reason e.g. death, or moving out of the catchment area were considered as drop-outs. The remaining patients who successfully completed all the assessments during the active treatment and follow up phase were categorized into three groups based mainly on the adequacy of their treatment compliance as follows:-

- (a) the fully treated group-comprised of patients who had taken regular treatment in the hospital and were subsequently available for all follow up visits.
- (b) the partially treated group-consists of those patients who had been admitted in the hospital and took treatment for at least 2 days (48 hours) but at some stage thereafter but before complete recovery they discontinued treatment. However, they were otherwise available for all follow up visits.
- (c) the untreated group consisted of patients who refused treatment from the very beginning or left the hospital within the first 48 hours, but were, nevertheless, available for regular follow up throughout the period of study. This group consisted of a substantial number of patients, who after their initial evaluation refused to take 'allopathic' or medical treatment, but preferred to visit the faith healers or 'sayanas'. All these patients were followed-up in the same manner as other patients included in the study. They thus provided us a unique control group to elucidate the natural course and outcome of acute psychosis not modified by the use of potent psychoactive drugs.

### **Ethical issues**

It was mandatory in each case at the time of admission into the hospital, to inform the nearest first degree relative accompanying the patient about the nature of the project and the type of treatment to be given to the patient including ECT if necessary, and get his written consent recorded on the patients record chart.

The second issue which was the subject of considerable discussion and debate was whether the patients should be taken off all drugs as soon as they were symptom free, or as is the usual practice of most clinicians to gradually taper off the drugs over a period of weeks or months and in some cases to continue small maintenance doses. Since the basic assumption is that 'acute psychosis' is an acute illness with good prognosis and complete recovery it was agreed that once the patient was symptom free there was no good reason to keep him on low doses of medicine or slow tapering off over a period of weeks or months. Further, it was noted that to date, there was no evidence in the literature to suggest that any particular neuroleptic medicine had a protective influence in preventing a future recurrence of

the illness. Hence, it was decided that no maintenance dose of drugs was normally to be given in any patients however, in cases of relapse, the chief investigators were free to put the patient on maintenance therapy if in his opinion it was considered clinically indicated.

### A. Analysis of data

The data generated at all four centres was pooled and checked for consistency and quality control at the coordinating centre. The analysis plan was worked out in consultation with consulting statistician of ICMR.

The analysis of data in SCAAPS was done in two stages

#### (a) Computer analysis of all the coded variables :

Tabulation of all the variables recorded was done centrewise and for each ICD 9 and ICMR Diagnostic categories. The first fifteen ranked symptom profiled were also tabulated. Keeping in view the objectives of various variable of the study, the association were specifically examined with reference to the acuity of onset, symptom profile, outcome and ICD 9, ICMR and catego diagnosis. Outcome was coded into five categories as follows:

1. Full remission
2. Full remission with one psychotic relapse.
3. Full remission with more than one psychotic relapse.
4. No full remission—residual symptoms persisting.
5. Still in index episode.

#### (b) Content analysis of all the details given in the blocks under the section 'Psychiatric history and social description also the narrative summaries of each patient was also carried out.

The P.S.E. data was analysed using the catego classification for the main psychotic groups in order to study the agreement of ICD 9 and ICMR diagnostic categories with catego classes.

## Observations

Table 1 gives the socio-demographic characteristics of the acute psychosis patients.

*Age* : It is seen that a vast majority i.e. more than 70 % cases (248 out of 323) at all the four centres were below 30 years of age. There was no significant difference in age distribution across centres.

*Sex* : There was no significant difference in the male-female distribution of cases at the four centres. The overall male-female ratio for the total sample was found to be 176 males Vs 147 females (54 : 46). However, in the Vellore sample, the female percentage was more than males (56 : 44) and was probably related to the higher number of out-patient female patients registered at that centre, but the difference was not significant ( $P = < .05$ ).

*Marital Status* : The above table shows that 45 % of the cases were single, 53 % were married and 2 % in the other category i.e. separated, divorced etc. married cases were found to be significantly more at the Bikaner centre i.e. 78 % of cases as compared to other centres ( $p = < .05$ ).

*Education* : It is seen that cases from Vellore had significantly higher educational level than those from other centres. While 48 % of cases were reported to have done high school and above education from Vellore, 26 % cases reported the same from Patiala. However, from Bikaner and Goa this percentage respectively was 17 and 15 only. On the other side, as many as 60 % of cases from Bikaner, 43 % from Goa, 37 % from Patiala had either no education or no systematic education. Vellore had only 10 % cases in this category.

*Socio-economic status* : Out of all the four centres 35 % of the cases belonged to the below average socio-economic status category, while 52 % and 13 % belonged to the average and above average categories respectively. However, significant difference was found in cases with above average socio-economic status reporting from Bikaner as compared to other centres ( $p = < .05$ ).

*Occupation* : Table 1 indicates that there is a significant difference in the occupations of cases in the four centres ( $p = < .05$ ). When related to the nature of population, cultivators and labourers were found to be more in Bikaner (41 %) and Patiala (52 %) and household work more common in Vellore centre (50 %) perhaps due to higher number of females in their sample.

Table 2 shows the total number of cases of acute psychosis (diagnosed according to the inclusion and exclusion criteria employed in this study) as percentage of all cases of Psychosis seen at each of the four centres and also their age group distribution.

It is seen that number of acute psychotics constituted between 6.7% to 13.3% of all psychotic cases seen at different centres with a mean of 8.7%. Thus it can be concluded that using strict criteria a little under 10% of all cases of psychosis seen in different centres in India present with an acute onset. This figure would be much higher if we remove the exclusion criteria of residence in a defined catchment area and reporting to hospital within 2 weeks of onset of illness.

It is further evident that acute psychosis occurs more frequently in the younger age group—35% of all cases were in age group 15-20 years and another 41.4% in age group 21-30 years. Thus over 76% cases were in age group of 15-30 years as compared to 47% for the total sample of psychosis patients seen in the clinics. With increasing age there were comparatively fewer number of acute psychosis patients 12.6% in 31-40 years age group as compared to 23.5% for total sample, 8.3% in the 41-50 years age groups as compared to 17% for total sample and only 2.1% in 51-60 year age groups as compared to 8.5% of total sample and none in age group above 60 years. This pattern was seen across all centres and there were no significant differences between centres.

Table 3 shows the break down by sex of acute psychosis patients as compared to the total sample of psychosis seen in each centre. There were slightly more males than females in the total sample of acute psychosis cases (male : female ratio being 55 : 45). However, the male : female ratio for all psychotics also shows a male preponderance—being 59 : 41, thus the sex distribution for total sample of acute psychosis is very similar to that for psychotics as a whole. However, looking at figures from various centres separately we see an excess of males over females for all psychotic patients seen at Bikaner centre,—this excess being less marked for the acute psychosis group, than the psychosis as a whole. On the other hand, in Vellore there is an excess of females over males (male : female ratio being 44 : 56) in the acute psychosis group, whereas for all psychosis there is again a slight excess of males over females (56 : 43) as seen for the total sample for all centres. This can be explained by the fact that the Vellore sample of acute psychosis cases had a fairly large percentage (20%) labelled as hysterical psychosis—and since these were all females, they tended to increase the number of females Vs. males in the acute psychosis sample population from Vellore. In Contrast in other centres the number of hysterical psychosis cases were between 2% to 6% only.

Table 4 shows that over half the cases (54%) had a very acute onset i.e. less than 48 hours and this was significantly higher at Goa centre ( $p = < .05$ ). It was 83% in this centre when compared to the average of 54% from all four centres. Acute onset (from 48 hours upto 1 week) was found in an average of 33% of cases and sub-acute onset (between 1 to 2 weeks) was seen in only 44 subjects i.e. 14% of cases from all centres).

Table 5 shows that of the total sample, 19% of cases were found to be definitely reactive, 28% were possibly reactive and 53% were not reactive. An average of 53% of the cases at all centres were rated as not reactive except at Vellore where they comprised only 38% of cases. Combining the first two categories, roughly half cases are listed as reactive or possibly reactive and a little over half are definitely not reactive.

Table 6 shows that an average of 30 % of the cases reported presence of physical/somatic stress in the four centres. 68 % reported absence of stress and 2 % were uncertain. Presence of stress was reported highest at the Patiala Centre.

As seen in Table 7, physiological stress was found in total 97 cases out of 323 i.e. 30.3 %. The most frequent of this physiological stress was febrile illness i.e. 18 % and highest in Patiala Centre. The relative frequency of Accident/injury, child-birth was equally distributed across Centres, while the third category of other (illness) or operations was highest in Goa Centre.

Table 8 shows that there was a positive history of presence of mental stress in nearly half of all subjects of acute psychosis (49.5 %). However, a screening of their clinical case record revealed that in only 26 % was there a clear evidence of symptoms which directly reflected the occurrence of a stressful life event or situation (see Table 9).

In Table 10, out of a total of 323 patients included in this study, history of previous mental illness was found only in 21 cases i.e. 6.5 % which is very low (mainly because the patients with a previous episode of psychotic illness were excluded from the study). In only 17 cases (5.3 %) a previous history of neurotic illness was obtained and in 4 cases i.e. 1.2 %, a doubtful history of psychotic illness was obtained. The chi-square value between these centres has come out to be 3.65 % which is insignificant.

Table 11 shows that only 20 % of all cases gave a history of experiencing chronic difficulties-these were reported by a higher percentage of cases from the Goa and Vellore Centres when compared with those from Bikaner and Patiala.

Table 12 shows that 75 i.e. 23.3 % out of 323 patients have reported tension in interpersonal relationship. The most common being with other family members followed by conflict with the spouse. As expected, the frequency is higher in Goa and Vellore as compared to Patiala and Bikaner. In Goa centre 26 (30.6 %) have difficulties in interpersonal relationships. This may be because in Goa most of these patients were alcoholics as seen in Table 13.

Table 13 shows that only 10 % of the total patients had a history of alcohol or drug abuse. A majority (24 out of 33) were taking alcohol and relatively smaller number were taking cannabis (mainly from Bikaner). Alcoholics were mainly from Goa centre i.e. 10 out of 24, which represents the general nature of Goa's population. In Bikaner some patients were taking Alcohol, Bhang and Ganja together in heavy amount.

Table 14 shows that only 14 out of the 323 patients (4.3 %) were reported to have participated in abnormal or otherwise deviant social activities prior to onset of illness. Out of a total of 323 patients, only 84 i.e. 26 % were found to be having abnormal premorbid personality while 74 % were rated normal. Majority of the patients with abnormal personality were hysterics and were mainly from Vellore (19 out of 28). The percentage of Schizoid personality is high in Bikaner (10.3 %) and Goa (9.4 %) centre and may be attributed

to the fact that Bikaner and Goa centres have majority of the patients with diagnosis as Schizophrenia. (See Table 15 and 16).

The inter-centre difference of abnormal personality is statistically significant at 1% level ( $X^2 = 15.592$ ,  $p < 0.01$ ).

Table 17 shows that 23% of cases reported positive history of mental illness in the family. This was however less at the Vellore centre when compared with others ( $p < .05$ ).

Table 18 shows the prevalence of mental illness in the relatives broken down by I.C.D. 9 categories. A total of 73 out of 323 patients (22.6%) gave a positive history of mental illness in some relative.

There is no difference in the presence of a positive history of mental illness in relatives among the I.C.D. categories figures being almost identical 23% for Schizophrenia, 29% for MDP and 28% for Non organic psychosis.

Table 19 similarly shows the prevalence of a positive history of mental illness in relatives of patients as per the I.C.M.R. descriptive categories. Of the total sample, 22.6% gave a positive family history of mental illness in some relative. Among the two most commonly diagnosed categories i.e. predominantly excited and paranoid type, positive family history was obtained in 28% and 20% cases respectively. Highest percentage of positive family history was in the Possession type (50%) and other type (60%). However, the number of cases was very small being only 2 in possession type and 3 in other type.

Table 20 shows Family history of Mental disorder. In three centres viz. Patiala, Goa and Bikaner positive family history was present in almost identical ratio i.e. between 30.35% only Vellore centre showed a low figure of 13%. This is probably because of the large number of hysterical psychosis patients in which there was no positive history of mental illness. A positive history of mental illness in 1st degree relatives of the patients was found in 90 subjects out of a total of 323 (27.9%). (sibs in 43 cases, mothers in 30 cases, and father in 13 cases).

Table 21 shows centre versus living with Mental patient. The total number of subjects who were reportedly living with a mentally ill person is quite low (Total 22 or less than 7%). The maximum number of cases living with a mental patient was reported from Goa (14%) followed by Bikaner (8%) Patiala (4%) and none from Vellore.

Table 22 shows that out of 323 patients, 23 (7%) patients were found belonging to minority group, 16 (5%) were S.C. and only 4 (1%) belongs to backward class, which is very low in number as compared with general population. Hence the hypothesis that the persons belonging to minority group are more prone to stress or psychotic illness does not follow from the study. The inter centre differences are significant at 1% level of significance ( $X^2 = 11.00$ ,  $p < .01$ ) it may be due to local differences in the population studied

with Vellore having relatively more S.C./S.T. patients as compared to other centre, and Goa having the least number.

Table 23 shows the level of social functioning in the month prior to initial contact with the Centre as assessed at the time of intake interview. In a little less than half (47%) it was not possible to make any assessment. Of the remaining, no case was reported as severely impaired, 37% were mildly impaired and 16% were unimpaired. It is interesting to note that of the 50 patients (16%) who were unimpaired, 25 (50%) were labelled as schizophrenics, 16% were labelled M.D.P. and 30% as other non organic psychosis. The distribution in mildly impaired group was about the same in the three diagnostic categories.

Table 24 shows that 50% of cases belonged to only 2 diagnostic categories viz predominantly excited, and predominantly paranoid types while the other 50% were distributed over remaining 8 categories. Between the centres the highest number of predominately excited type were reported from Bikaner while hysterical type were more at Vellore centre.

Table 25 shows that there was no significant association observed between the various I.C.M.R. descriptive categories and occurrence of stressful events.

Table 26 shows that it was observed that nearly 40% were diagnosed under I.C.D.—298, other non-organic psychosis and in others and unspecified categories, 35% were diagnosed as schizophrenics (I.C.D.—295) and 25% as M.D.P. (I.C.D.—296). The percentage of cases labelled schizophrenia at Bikaner centre was 59 which was significantly higher than those from other centres.

Table 27 shows that at 1 year the percentage of cases labelled as schizophrenia (295) was still 35%, in M.D.P. (296) there was a slight increase from 25% to 29% and in the other non-organic psychosis and other unclassified categories there was a decrease from 40% to 36%.

Table 28 shows that a clinical presentation of withdrawn or paranoid type was significantly more likely to be labelled schizophrenia than other categories, whereas the predominantly excited, elated and depressed categories were significantly more often labelled as M.D.P. All the cases labelled as other and unspecified belonged to the paranoid type.

Table 29 shows that the treatment compliance was very good. As high as 86% of all cases received the full treatment, 11% received partial treatment and only 3% were untreated. However, between centres treatment compliance was relatively lower at Bikaner centre as compared to the other centres.

Table 30 shows that neuroleptics were used by 85% of all cases. There was no significant association between the use of neuroleptics and any of the I.C.D. diagnostic

categories, although neuroleptics were not used in 25% cases of M.D.P. as compared to 2% of schizophrenics and 11% of other non-organic psychosis categories.

Table 31 shows that antidepressants were used in 15% of all cases. Anti-depressants were used in significantly higher number of patients diagnosed as M.D.P. when compared with other categories i.e. in 29% of M.D.P. cases, 13% other non-organic psychosis cases, 4% schizophrenics and 1% other categories.

Table 32 shows that there was no significant association between any I.C.D. diagnostic category and the use of other psychoactive drugs. They were used in only 10% of all cases, in addition to the neuroleptic or antidepressant drugs.

Table 33 shows the presence of each symptom for the total Sample for each centre. There was considerable variation in frequency of occurrence of particular symptoms across centres. No conclusions can be drawn from this.

Table 34 shows the percentage of symptoms present in each of the three ICD categories. The symptoms which are starred are significantly more common in one clinical entity compared to the others whereas there is no significant difference in the other symptoms eg. it is seen that the symptoms of delayed sleep, suicidal plans, diurnal variation, expansive mood ideomotor pressure, grandiose ideas and irritability were significantly more common in M.D.P. The symptoms of social withdrawal lack of initiative, decreased ability to enjoy, auditory nonverbal hallucinations, visual hallucinations, stupor, muteness, irrelevant, vague and tangential speech and perplexity plus lack of insight and poor intellectual rapport were significantly more common among the schizophrenic patients. Finally, the symptoms of ideas of reference, verbal hallucinations based on affect, agitation or excitement and veractivity, hystelform behaviour and liability of mood, were significantly more common in the other non-organic psychosis group.

Table 35 shows outcome at 1 year. The outcome was rated as one of the following five categories. FOC 1-implies full remission with no relapse of the psychotic illness. FOC-2 full remission with one psychotic relapse. FOC-3-Full remission and more than one psychotic relapse.

FOC-4-No full remission residual symptoms persisted.

FOC-5 -Still in index episode.

75% of all cases were fully recovered with no relapse of psychotic illness at 1 year follow up 8.7% of cases had full remission with one psychotic relapse and less than 1% had full remission with more than one relapse during the 1 year follow up period 8.7% did not achieve full remission and residual symptoms persisted at 1 year while another 5.9% cases were still in the inclusion psychotic episode.

Table 36 shows that 75% of the cases from all the four centres showed full remission with no relapse in the final outcome. Another 10% cases had complete remission with one

or more than one relapse. Cases who did not have complete remission and still persisted with residual symptoms (8.7%) or those which still remained in the inclusion episode (5.9%) made a total of 15%. There was no significant difference between the four centres.

Table 37 shows that outcome was not found to be significantly related to age, although the number of persons with complete recovery was greatest in the Youngest age group i.e. in 15-20 years (81%) outcome of cases with complete remission with one or more than one relapse was more often seen in the oldest age group i.e. 41 years and above (26%). The poorest outcome was revealed in cases with no complete remission and with residual symptoms, and cases who still remained in the inclusion episode were most frequently seen in age group 21-30 years.

Table 38 shows that a shorter duration of illness is associated with a better outcome 81% cases with duration less than 1 week showed better outcome. In cases with full remission with one or more than one relapse of poor outcome were more common with longer duration of illness but these differences were not found to be statistically significant.

Table 39 shows a history of previous episode was significantly more often seen in patients showing recurrence of illness i.e. in cases with full remission with one or more than one relapse.

Table 40 shows that the patients with very acute onset i.e. symptoms occurring less than 48 hours had the best outcome i.e. 82% of cases had full remission and no relapse 9% of cases had full remission with 1 or more than one relapse, and 9% cases were without full remission with residual symptoms or were still in the inclusion episode. Patients with an acute onset i.e. 48 hours upto 1 week also showed good response with complete recovery in 74% cases, while 7% fell in outcome categories 2 and 3 and 20% in outcome categories 4 and 5. Patients with subacute onset i.e. one to two weeks had the poorest outcome-only 55% achieving a full recovery as compared to 82% and 74% in the acute onset categories.

Table 41 shows that there was no significant difference between the number of cases with full remission with no relapse i.e. full recovery between those receiving treatment and those not receiving treatment. This was seen in 79% of those receiving full treatment, and 82% of the non-treatment group. Similar was the case for bad prognosis categories, such as the cases with no complete remission and left with residual symptoms and those still in the inclusion episode the percentage for treated and non-treatment group was 11 and 18% respectively. Hence, it would appear that these groups are clinically similar and the illness is a potentially self limiting condition with full recovery in the majority of cases. (about 80%) whereas the bad prognosis cases were also not seen to benefit much from therapy. However, among the partially treated patients only 51% of cases attained full recovery, 9% cases had relapse with partial recovery and 40% had poor prognosis i.e. cases with no complete remission and were left with residual symptoms and those who were still in the inclusion episode.

Table 42 shows that the differences seen are not statistically significant but the best

prognosis is seen in cases receiving a diagnosis of other non-organic psychosis and the poorest prognosis is seen in patients receiving the diagnosis of schizophrenia.

Table 43 shows the outcome at 1 year follow-up according to the descriptive diagnostic categories.

Table 44 shows that it is interesting to note that in all centres, the number of cases fully recovered at 3 months is practically the same at 1 year suggesting that patient with the best outcome invariably recover completely within 3 months. out of a total of 19 cases who were still in the index episode at the end of 1 year follow up i.e. F.O.C. 5 the largest number (12) were at Bikaner centre and probably reflects the higher incidence and diagnosis of schizophrenia from the centre.

Table 45 shows the individual symptoms tabulated by the outcome. Following symptoms were found to be associated significantly with poor outcome (No remission ratings 4 or 5) at one year follow up :-

Tension & anxiety, decreased ability to enjoy, voices speaking to subject. agitation or excitement, anxiety, perplexity, irrelevant vague idiosyncratic behaviour.

Table 46 shows the findings derived by using the catego-programme. It is interesting to note that the largest number (22%) fell into the uncertain psychotic class and further 13% cases were assigned more than one catego class and therefore 35% of all cases of acute psychosis could not be classified into any clear out diagnostic category. Cases of schizophrenia (20%) and MDP (19%) were equally represented and they made up the bulk of remaining cases. Depressive psychosis was 6%, Reactive depression 5% and other classes made 2% cases.

Table 47 shows the correlation between the clinical I.C.D. diagnosis and the I.C.D. categories derived from the catego programme of the total 323 cases, the catego programme categorized only 282 cases, the rest were unclassifiable in any of these categories.

From the table, it is evident that there is considerable agreement between the clinical and catego diagnosis in cases of schizophrenia 'I.C.D. 295) where 48 cases are classified the same by both and for manic-depressive psychosis (I.C.D. 296) 43 case being correctly identified by methods. As can be expected, the greatest discrepancies arose in cases clinically labelled as other non-organic psychosis 298 and the N.O.S. 'other' group 298.9 of the 64 cases clinically diagnosed as 298 (0.8) none was so Classified by Catego a majority of these (45) were labelled as M.D.P. (296) another 10 cases as schizophrenic (295) and 9 cases as other psychosis similarly in the group of 30 cases of other N.O.S. (298.9) 13 were diagnosed as 296, 10 as 295 and 7 as other psychosis and none as 298.9.

## Cluster Analysis

An attempt was made to examine the hypothesis whether acute psychosis (as defined by the inclusion criteria of the present study) is a unitary entity. Whether the cases can be classified into one of the existing diagnostic categories of ICD-9 or these are distinct and need a separate category in the classification system. Break-up by ICD diagnosis (table 22) shows that about 40% of cases are categorised as other non-organic psychosis and others are unspecified. At the end of one year also about 37% of cases were classified as other non-organic psychosis and others and unspecified (table 23). This shows that a substantial number of cases (37%) cannot be classified in schizophrenia or in MDP using ICD criteria. When CATEGO Programme was used on PSE data, it was found that 21.67% of cases were categorised as uncertain psychotic classes and another 13.32% cases were assigned to more than one CATEGO Class (table 52). That is about 35% of cases did not belong to anyone certain CATEGO class. Thus, it is difficult to classify a substantial number of cases of acute psychosis into a definite category in the existing nosological system.

Now to test the hypothesis, whether acute psychosis is an unitary entity, we must find out whether it is a homogeneous group. On the basis of clinical presentation, the cases of acute psychosis do not form a homogeneous group as seen in table 16 (distribution of cases by ICMR descriptive categories). A study of distribution of symptoms in different ICD categories (table 34) shows that the cases belonging to a particular category (say schizophrenia) are significantly different from others with respect to presence of a number of symptoms. That is cases of each ICD category (schizophrenia, MDP and other non-organic psychosis) are similar amongst themselves and different from cases of other category, with respect to presence of a number of symptoms. Thus ICD categories retain their separate identity in this study sample also.

Cluster Analysis was done taking into consideration ten characteristics-five pertaining to premorbid functioning and five pertaining to outcome variables to see whether all the cases form a single homogeneous group or are split into more than one groups. Two independent samples of 50 cases each were drawn at random from the total of 323 cases and cluster analysis was done for two samples independently. Samples were drawn because similarity matrix of all the cases taken together ( $323 \times 323$ ) would be unmanageable as it would require working with over one lakh similarity indices. Two samples were drawn to see the consistency of results.

Sample I yielded two clusters—cluster I consisting of 44 cases and cluster II of six cases. The distribution of pre-morbid characteristics and outcome characteristics of the two clusters are shown in table A. It shows that majority of cases (44) were similar to each other and form a homogeneous group with respect to premorbid and outcome

characteristics. The six cases of cluster II are similar to each other and show a poor outcome. Four out of six members of cluster-II were found to have been categorised in uncertain psychotic classes by the CATEGO Programme. Although, number of cases in this cluster are small, it indicates that cases of this group of patients who had poor outcome, were also difficult to classify into a certain psychotic class of CATEGO.

Sample II also yielded two clusters-Cluster-I consisting of 45 cases, and cluster-II consisting of 4 cases. One case was different from cases of both the clusters. Majority of cases (45) form a homogeneous group with respect to pre-morbid and outcome characteristics like sample I. The four cases of cluster II are different from the cases of cluster I and show a poor outcome. Two of the four cases of cluster II belong to uncertain psychosis classes by CATEGO method. One case which did not belong to any cluster was also categorised as uncertain psychotic by CATEGO method. This case had stressful event and presence of chronic difficulty prior to onset of disease and continued in the index episode till one year follow up.

Cluster analysis in both samples show that majority of cases of acute psychosis are similar to each other with respect to course and outcome of the disease (upto one year period) In spite of variations in clinical symptomatology, majority of cases of acute psychosis show an early recovery and seem to form a unitary entity in that respect.

TABLE A

*Sample I*

Sample characteristics	Cluster I N = 44	Cluster II N = 6
Presence of stressful events within 3 months preceding the onset of illness	18	3
Presence of psychological or somatic stress	15	0
Presence of chronic difficulties	11	0
Abnormal promorbid personality traits	10	1
Abnormal premorbid social functioning	1	0
Full remission at 3 month follow up	34	0
Full remission at 6 months follow up	39	0
Full remission at one year follow up	43	2
Special functioning normal at 1 year follow up	39	2
Full remission from index episode and no psychotic relapse upto one year	39	1

TABLE B

*Sample II*

Sample characteristics	Cluster I N=45	Cluster II N=45
Presence of stressful events within 3 months preceding the onset of illness	17	0
Presence of psychological or somatic stress	10	1
Presence of chronic difficulties	7	0
Abnormal premorbid personality traits	14	1
Abnormal premorbid social functioning	2	0
Full remission at 3 months follow up	38	0
Full remission at 6 months follow up	44	0
Full remission at one year follow up	45	2
Social functioning normal at 1 year follow up	44	0
Full remission from index episode and no psychotic relapse upto one year follow up	44	1

## Discussion

Acute transient psychosis characterised by an acute onset, often associated with stressful events and with a variety of symptoms including delusions, hallucinations, psychotic excitement, confusional states with affective features but without the characteristic primary symptoms of Schizophrenia have been reported. Such cases have been described from time to time by various workers who gave them different names such as Boufféedélirante, (Magan) Schizo-affective psychosis (Kasanin 1933), Reactive psychosis (Jaspers—1913), (Mc Cabe 1975) or Good prognosis Schizophrenia (Mc Cabe et al 1972) and Schizophreniform psychosis (Langfeldt 1937). These were generally of a short duration with recovery within three months and were thus differentiated from classical Schizophrenia.

Psychiatrists in India have also frequently reported on the occurrence of such Acute Psychotic episodes with good prognosis and which do not fit into the traditional Schizophrenia or Manic Depressive Psychosis (Wig and Singh 1967, Kapur and Pandurangl 1979).

The Recent WHO International follow up study of Schizophrenia also reported that single episodes with acute onset and full remission were more frequent in India and Nigeria, whereas chronic progressive course was more frequent in Western Countries.

In view of the above the ICMR Mental Health Advisory Committee recommended that a prospective study of the Phenomenology and natural history of Acute Psychosis should be taken up as a priority project. The importance of determining the clinical picture, course and outcome of these acute psychotic episodes is of utmost importance since most of them often tend to be labelled as Acute Schizophrenic episodes with the result that they may unnecessarily be exposed to long term potent neuroleptic drugs with their attendant side effects. Further, if these cases are found to be different from classical schizophrenia, any research on Schizophrenia which includes such cases is likely to be strongly biased towards a better prognosis than a sample of chronic process Schizophrenia.

The first task of the Research Group was to develop specific criteria for defining a case of Acute Psychosis for which specific inclusion and exclusion criteria were developed (Appendix). Further, based entirely on their predominant clinical presenting symptoms a set of descriptive diagnostic categories was developed to give a clear picture of the phenomenology (Appendix VII). Each patient was also assessed for the presence or absence of stress factor and labelled as reactive, possibly reactive or non-reactive.

Operational definitions for all these symptoms, categories as well as for remission and relapse were developed (Appendix III).

The main instruments used were (1) The screening proforma (Appendix II) which was administered to all cases of psychosis attending the facility for the first time. Only those patients who fulfilled the inclusion criteria were admitted in Hospital and administered the other two instruments, (2) SCAAPS: The original Schedule for the Clinical Assessment of Acute Psychotic States was used with some modifications to suit local conditions. The PSE was administered to all cases included in the study during 1st week of initial contact and at the end of 1 year.

*Prevalence:* In spite of the rather strict inclusion and exclusion criteria employed in the study, including (a) that the patient must have reported to the centre within 2 weeks of onset of illness, (b) must be a resident within the defined catchment area, (c) no history of any previous mental illness. Overall prevalence rate was 8.7% of all cases of psychosis seen at the four centres. The figures would probably be much higher if we remove the stringent inclusion and exclusion criteria.

The male female ratio of acute psychosis cases was the same as that for the total sample of psychotics. However, it was seen that Acute psychosis is an illness occurring in the younger age-group. 35% of all cases were between 15 to 20 years of age and over 76% were below the age of 30 years. Apart from age of onset, the patients of Acute psychosis did not differ from the total sample of psychosis in any other socio-demographic variable.

### Onset

The onset of psychotic illness in these cases was found to be very rapid. In 54% cases, the interval between the onset of first symptom to the full blown psychosis took less than 48 hours and in other 33%, this period was between 48 hours and 1 week, and in only 1% this period was between 1 and 2 weeks. The present study does not support the hypothesis of purely Reactive or Psychogenic psychosis since 19% were found to be definitely reactive while 28% were rated as possibly reactive whereas 53% were rated as not-reactive and in those labelled as Reactive or Possibly reactive, physiological stress was more common (30%) than psychological stress (26%) whereas in some cases both were present.

*Premorbid Personality:* A majority of these patients (74%) were rated as having a normal premorbid personality and the remaining 26% included patients of hysterical personality or Schizoid personality and only 4% were reported to have deviant or anti-social personality.

*Family History of Mental Illness:* A positive family history was found in only 28% cases, and among these, the ICD categories of Manic Depressive Psychosis, Schizophrenia and Non Organic Psychosis were equally represented.

*Belonging to Minority Group:* Only 7% of all the patients were found to belong to minority or under-privileged group such as Scheduled Caste, Scheduled Tribes and Backward classes. Hence the hypothesis that persons belonging to a minority or under-privileged group may be more prone to stress and therefore psychotic illness was not confirmed.

*ICD Diagnosis:* At the time of initial contact, 35% were diagnosed as Schizophrenia (ICD 295), 25% as MDP (ICD 296) and the remaining 40% as under the ICD—298 other non-organic Psychosis (unspecified category). At the end of 1 year, the percentage of cases labelled as Schizophrenia remained the same (35%). There was a slight increase in the number of cases diagnosed as MDP (from 25 to 29%) with a corresponding decrease in Non-organic Psychosis (From 40 to 36%).

*ICMR Categories:* Almost 50% cases fell into only 2 Diagnostic categories i.e. predominantly excited and predominantly paranoid type while the remaining 50% were distributed over their remaining 8 categories. It was noted that the clinical presenting picture of predominantly withdrawn or predominantly paranoid type were significantly more likely to be labelled as Schizophrenia whereas the predominantly excited, elated and depressed categories were significantly more often labelled as MDP. Almost all the cases of Non-organic Psychosis (other and unspecified) belong to the predominantly paranoid type.

*Treatment Compliance:* Treatment compliance was very good. 86% received the full treatment and follow up, 11% received partial treatment and only 3% were untreated.

*Treatment:* Neuroleptics were the most commonly used drug in 85% of all cases and anti-depressants were used in the remaining 15% of cases. E.C.T. was used in only these cases who failed to respond to drug treatment.

*Clinical Outcome at 1 Year:* The outcome was rated into 5 categories (FOC—1 to FOC—5) 75% of all cases were in the category of FOC—1 at 1 year follow up i.e. fully recovered with no relapse of psychotic episode. Another 10% fell into categories FOC—2 (9%) or FOC—3 (1%) i.e. full remission with one or more relapses, while remaining 14% had a poor outcome (FOC—4-8% and FOC—5-6%).

It is interesting to note that all the cases who achieved full recovery at 1 year, had recovered completely within the first 3 months, whereas those who were still in the Index episode at 3 months tended to have a prolonged course and poor outcome.

Outcome was not found to be related to age or sex.

Acuteness of onset was related to the outcome.

Patients with very acute onset i.e. full blown picture developing within 48 hours had the best outcome 82% had full remission and no relapse, 9% achieved remission with relapse and only 9% did not achieve full remission at the end of 1 year. Patients with an acute onset (onset between 48 hours and 1 week) also showed good recovery but it was less dramatic than the previous category. Patients with a FOC—1 were 74%, FOC—2 and 3 categories, constituted 7% whereas the poor outcome categories FOC—4 and 5 increased to 20%. Finally patients with a sub-acute onset upto 2 weeks had the poorest outcome. Only 55% achieved full recovery as against 82% and 74% in the previous 2 groups.

*Outcome in Relation to Treatment:* The patients who did not receive any treatment for their illness were also followed up as the other cases and constitute a natural control group for comparison with the treated group. There were no significant difference in the number of patients achieving FOC—I. This being 79% in those receiving treatment and 82% for the non-treatment group. Similarly in bad outcome categories (FOC 4 and 5) the figures were 11% and 18% respectively. This would suggest that the patients with an acute or very acute onset and good recovery are clinically a similar group and their illness is a potentially self-limiting disease with full recovery in a majority of cases where as the sub-acute onset with a bad prognosis do not seem to respond even to drug therapy and have a poor ultimate outcome.

*Outcome and Diagnosis:* Although the differences were not Statistically significant but the best outcome was seen in the patients initially diagnosed as Non-organic psychosis whereas poorest outcome was seen in cases who received the diagnosis of Schizophrenia.

*Outcome and individual symptoms:* The symptoms of delayed sleep, suicidal plans, diurnal variation, expansive mood, ideomotor pressure, grandiose ideas and irritability were significantly more common in M.D.P. The symptoms of social withdrawal lack of initiative, decreased ability to enjoy, auditory non-verbal hallucinations visual hallucinations, stupor, muteness, irrelevant, vague and tangential speech and perplexity plus lack of insight and poor intellectual rapport were significantly more common among the schizophrenic patients. Finally, the symptoms of ideas of reference, verbal hallucinations based on affect, agitation or excitement and overactivity, hysteriform behaviour and liability mood, were significantly more common in the other non-organic psychosis group.

The following symptoms were found to be associated significantly with poor outcome (No remission, FOC—4 or 5) at one year follow up:—Tension and anxiety, decreased ability to enjoy, voices speaking to subject, agitation or excitement, anxiety, perplexity, irrelevant vague, and idiosyncratic behaviour.

*Analysis using Catego Programme:* On Catego programme the largest number (22%) fell into the uncertain psychotic class, and further 13% cases were assigned more than one catego class and therefore, 35% of all cases of acute psychosis could not be classified into any clear cut diagnostic category. There is a considerable agreement between the clinical and catego diagnosis in cases of schizophrenia (I.C.D. 295) where 48 cases are classified the same by both, and for manic-depressive psychosis (ICD 296) 43 cases being correctly identified by both methods, but the greatest discrepancies arose in cases clinically labelled as other non-organic psychosis (298.0-298.8) and the N.O.P. 'Other' group (298.9). Of the 64 cases clinically diagnosed as 298 (0 to 8) none was so classified by Catego. Similarly in the group of 30 cases of other N.O.P. (293.9) no case was diagnosed as such by the Catego programme. According to catego analysis, 20% of all patients of acute psychosis were diagnosed as schizophrenia, another 19% as cases of Manic depressive psychosis and 11% as Depressive psychosis or Reactive depression. Thus a full 50% were either not assigned to any clear cut diagnostic category (35%) or were assigned more than one diagnostic category (13%) or into "Other" class 2%.

The clinical diagnosis at initial contact and at one year follow up shows that although there is some shifting of individual cases from one diagnostic category to another, the overall percentage remains practically the same e.g. Schizophrenia is diagnosis given to 35% of all Acute Psychosis cases at both points of time. Manic depressive psychosis increases slightly from 25% initial to 28% at 1 year while the other and Non organic Psychosis constitute 40% at initial and 37% at 1 year follow up.

On the basis of the initial I.C.D. diagnosis as well as the I.C.D. diagnosis at 1 year follow up it is seen that out of a total No. of 323 cases of Acute psychosis as per inclusion criteria for the study, 35% were labelled as suffering from Schizophrenia while another 25% were cases of M.D.P. Thus the remaining 40% (161 out of 323) were cases which were unclassified and can be designated as cases of Acute psychosis not otherwise specified. This group of cases has been compared with total sample of Acute psychosis cases included in the present study. It was seen that these cases did not differ on any of the sociodemographic variables including age, sex, marital status, educational level, rapidity of onset or family history. The presence of mental or physiological stress preceding the psychotic breakdown was more often seen in this group. 50% had a positive history of mental stress and 30% of physiological stress.

The clinical presenting symptoms in this group of 161 patients as compared to the total sample are shown in table 48. The predominant picture being of an acute paranoid reaction. However, there were significant differences on a few specific symptoms which were much less in this group. For example, Anxiety was seen in only 13% cases of this unclassified Acute Psychosis group as compared to 46% of the total sample, perplexity was seen only in 5.5% of this group as compared to 36.4% in total sample and agitation or excitement in 24.8% versus 57.5% of total sample. Similarly the frequency of occurrence of the following symptoms—vague, tangential and idiosyncratic speech, pressure of speech, grandiose ideas and expansive mood were significantly less than the total sample. Thus it can be concluded that the following symptoms which have been shown to be significantly associated with poor outcome (F.O.C. 4 and 5) viz. tension and anxiety, decreased ability to enjoy, voices speaking to subject, Agitation or excitement, anxiety, perplexity, irrelevant vague and idiosyncratic behaviour are either absent or seen in very few cases of this core group of acute psychosis.

The number of patients attaining full recovery in this group is 151 out of 161 (94%) whereas only 10 patients (60%) had not shown full recovery at 1 year follow up. Of these 15 cases (9%) had a relapse of the illness within the one year follow up whereas remaining 85% continued to remain well without any maintenance treatment of any kind. This compares with a figure of 75% having full recovery, another 10% having full recovery with one or more relapse during the 1 year follow up and 14% with poor outcome for the total group. Further it may be pointed out that almost all cases, in this group, recovered fully within 3 months and only 6 cases recovered between 3 and 6 months.

Thus it is evident that Acute psychosis cases as defined for purpose of this study comprise of 3 distinct groups (a) Those labelled as schizophrenic clinically (35%) on category 20% (b) Manic depressive psychosis clinically 25%, on category 19% and (c) those cases who do not fit into any clearly defined diagnostic category clinically 40% and on category 50%.

## Conclusions

1. Patients suffering from an acute psychotic illness (onset of illness less than 2 weeks and in a majority of cases less than 48 hours) are frequently seen in psychiatric centres all over India. Using the strict inclusion criteria in the study such patients constitute 9% of all psychotic patients attending the facility for the first time.

2. The most common presenting symptoms of such patients are ideas of references, delusions of persecution, irritability, agitation or excitement and over activity, inappropriate or bizarre behaviour. Presence of anxiety, depression and hostile irritability is also seen in a fair number of cases. Primary Schizophrenic thought disorder or voices speaking to the patients were uncommon.

3. According to the I.C.M.R. descriptive category the most common presenting picture is that of predominantly excited or predominantly paranoid type.

4. Majority of these patients are in the age group of 21-30 years with equal distribution of males and females.

5. Presence of psychological stress was seen in roughly half of all the cases and in another 20% cases there was some additional physiological or somatic stress (e.g. Febrile illness or childbirth) However using the specified criteria for definitely reactive. Possibly reactive or non reactive, it was found that the illness was definitely reactive in only 20% cases.

6. The onset of illness was very acute (interval between onset of first symptom to the full blown illness was less than 48 hours in over half the cases). In 33 cases, it was between 48 hours and 1 week and in 14% it was between 1 and 2 weeks.

7. A majority of these patients were rated as having a normal premorbid personality (74%).

8. I.C.M.R. descriptive categories were very easy to use with a fairly high degree of reliability. Almost 50% cases fell into only 2 diagnostic categories predominantly paranoid and predominantly excited categories.

9. Using the I.C.D. Diagnostic categories most of the cases were clinically diagnosed under the existing 3 categories viz I.C.D.-295 (Schizophrenia- 35%, I.C.D. 296 (MDP- 25% and I.C.D. 298 (Non organic psychosis) - 40%. However, out of these there were 41 cases who could not be put under any of these categories and a separate category 298.9 was used for these cases. (13%) - their breakdown centre wise was : Patiala-7 cases; Bikaner - 6 cases ; Goa - 12 cases; Vellore - 15 cases. At the end of 1 year the number of

cases labelled as schizophrenia remained 35%, MDP was 29% and non-organic psychosis category was 36%.

10. Using the catego programme, only 20% cases were labelled as definite schizophrenia and 19% as definite MDP, with Depressive Psychosis accounting for another 6%. Of the remaining 55% cases, 35% could not be classified into any clear cut Diagnostic category while another 20% were assigned to more than 1 catego class. There was considerable agreement between clinical and catego, diagnosis in cases of Schizophrenia 48 cases being correctly classified by both methods and the same holds true of I.C.D. category 296 (MDP) with 43 cases being labelled correctly by both methods. The greatest discrepancy arose in cases labelled as 298.0 to 298.9.

11. There were, thus a total of 178 cases out of the total sample of 323 cases of Acute Psychosis which were not classified into any specific category by catego. A detailed qualitative analysis of the case records and narrative summaries of these patients was carried out, and in 17 cases certain positive features were seen to be present but which had not been scored in the SCAAPS or PSE, so that they could now be diagnosed as either I.C.D. 295 or I.C.D. 296. However, we are still left with 161 cases (constituting 50% of the total sample of acute psychoses cases included in this study) who could not be categorised into any specific diagnostic category. The centre wise breakup of these cases was - Patiala- 40 cases, Bikaner - 42 cases, Goa - 42 cases, and Vellore - 37 cases.

12. Recovery : For the total sample the best outcome i.e. FOC I full recovery with no relapse was seen in 75% cases, however on excluding the Schizophrenic and MDP cases in the remaining 161 cases, this best outcome was seen in 85% of the 'Core' group of acute psychosis cases. The number of patients who had full remission with one or more relapse FOC 2 and 3 was 10% for the total sample and 9% for the core group. Finally the worst outcome i.e. FOC 5 & 5 - either clinical remission with residual symptoms or still in the index episode without recovery accounted for 14% of the total sample and only 6% of the core group.

13. Outcome variables : Outcome was not found to be related to age, sex, premorbid personality, family history of mental illness or presence of stressful events. However, outcome was positively related to the acuteness of onset. Recovery rate was best in those with very acute onset i.e. onset within 48 hours. 89% of these had achieved full remission with no relapse at 1 year follow up as compared to those with a sub acute onset (i.e. that it took up to 2 weeks for development of full blown picture). There was no relation of outcome to the nature of the treatment and even those who did not receive any medical treatment had a similar recovery rate of 82%.

14. The following symptoms were significantly associated with poor outcome - Presence of tension and anxiety, decreased ability to enjoy, voices speaking to subject (Auditory Hallucinations) Agitation or excitement, anxiety, perplexity, irrelevant vague and idiosyncratic behaviour. It is important to note that most of these symptoms were not seen in the core group of Acute psychoses cases especially those with the best outcome.

15. The clinical presentation of an Acute Psychotic illness thus includes three main categories of Patients (a) Approximately 25 % both at initial contact and at 1 year follow up and confirmed by catago performance to be cases of Schizophrenia (b) 25 % are found to be cases of M.D.P. (c) remaining 50 % cases in which there are no clear cut symptoms of schizophrenia or primary affective disorder and in addition don't show the symptoms of anxiety or perplexity etc. listed above as associated with a bad out come constitute third group of an acute Psychosis not heretofore recognised as a separate group. However these patients differ from the too former groups not only on the basis of their clinical picture but also on the basis of their normal premorbid personality, absence of family history of mental illness and an excellent recovery rate over 85 % and at 1 year follow up were continuing to remain well without maintenance treatment. The fact that some of these patients who for some reason did not receive any medical breatment also showed the same recovery rate and good outcome suggest that they may be a benign self limiting condition which is triggered by a psychological (78 out of 161 cases) or physiological or somatic stress (22 out of 161 cases).

16. Finally a longer follow up of these cases is essential to determine the long term outcome of this group of core Acute Psychosis cases

TABLE I  
Socio-demographic characteristics

Demographic characteristic	Bikaner N=68	Goa N=85	Patiala N=102	Vellore N=68	All Centres N=323	X <sup>2</sup>
<b>Sex</b>						
Male	39 (57.35)	49 (57.65)	58 (56.86)	30 (44.12)	176 (54.49)	3.75 ( $P < .05$ )
Female	29 (42.65)	36 (42.35)	44 (43.13)	38 (55.88)	147 (45.51)	
<b>Age</b>						
15—20	18 (26.47)	24 (28.24)	43 (42.16)	29 (42.65)	114 (35.29)	
21—30	36 (52.94)	35 (41.18)	38 (37.25)	25 (36.76)	134 (41.48)	
31—40	7 (10.29)	16 (18.82)	12 (11.76)	6 (8.82)	41 (12.69)	13.52 ( $P < .05$ )
40+	7 (10.29)	10 (11.76)	9 (8.82)	8 (11.76)	34 (10.53)	
<b>Marital status</b>						
Single	15 (22.06)	47 (55.29)	51 (50.0)	31 (45.59)	144 (44.58)	
Married	53 (77.94)	36 (42.35)	48 (47.06)	34 (50.0)	171 (52.94)	19.15 ( $P < .05$ )
Others	0 (0.00)	2 (2.35)	3 (2.94)	3 (4.41)	8 (2.48)	
<b>Educational status</b>						
Illiterate	27 (39.71)	16 (18.82)	37 (36.27)	7 (10.29)	87 (27.0)	
No sys. Edn.	14 (20.59)	21 (24.71)	1 (0.98)	0 (0.0)	36 (11.1)	
Primary	12 (17.65)	19 (22.35)	29 (28.43)	16 (23.53)	76 (23.5)	
Middle	3 (4.41)	16 (18.82)	8 (7.84)	12 (17.65)	39 (12.1)	64.01 ( $P < .05$ )

(1)	(2)	(3)	(4)	(5)	(6)	(7)
High school	3 (4.41)	7 (8.23)	20 (19.61)	25 (36.76)	55 (17.0)	
Others	9 (13.23)	6 (7.06)	7 (6.86)	8 (11.76)	30 (9.4)	
<b>Socio-economic status</b>						
Above average	13 (19.12)	7 (8.24)	13 (12.75)	9 (13.24)	42 (13.00)	
Average	40 (58.82)	39 (45.88)	58 (56.86)	30 (44.12)	167 (51.70)	13.77 ( $P < .05$ )
Below average	15 (22.06)	39 (45.88)	31 (30.39)	29 (42.65)	114 (35.30)	
<b>Occupation</b>						
Cultivation	16 (23.53)	3 (3.53)	21 (20.59)	4 (5.88)	44 (13.62)	
Labourer	12 (17.65)	17 (19.99)	32 (31.37)	8 (11.76)	69 (21.36)	
Householdwork	13 (19.12)	24 (28.24)	32 (31.37)	34 (49.99)	103 (31.89)	
Student	4 (5.88)	9 (10.59)	8 (7.84)	11 (16.18)	32 (9.91)	93.5 ( $P < .05$ )
Business	13 (19.12)	2 (2.35)	8 (7.84)	5 (7.35)	28 (8.67)	
Others	10 (14.71)	30 (35.29)	1 (0.98)	6 (8.82)	47 (14.35)	

TABLE 2. Breakup by age of acute psychosis Vs Total psychosis attending facility

Centre Age groups	Bikaner		Goa		Patiala		Veliore		All centres	
	Acute psycho- sis N=68	All psycho- sis N=1005	Acute psycho- sis N=85	All psycho- sis N=635	Acute psycho- sis N=102	All psycho- sis N=1323	Acute psycho- sis N=68	All psycho- sis N=737	Acute psycho- sis N=323	All psycho- sis N=3700
15—20	18 (26.47)	172 (17.13)	24 (28.24)	68 (10.7)	43 (42.16)	172 (13.0)	29 (42.65)	109 (14.19)	114 (35.29)	521 (14.08)
21—30	36 (52.94)	368 (36.61)	35 (41.86)	203 (31.96)	38 (37.25)	413 (31.2)	25 (36.76)	243 (32.98)	134 (41.48)	1227 (33.16)
31—40	7 (10.29)	235 (23.38)	16 (18.82)	172 (27.0)	12 (11.76)	283 (21.4)	6 (8.82)	180 (24.42)	41 (12.69)	870 (23.51)
41—50	6 (8.82)	131 (13.03)	8 (9.41)	110 (17.32)	6 (5.88)	261 (19.7)	7 (10.29)	129 (17.50)	27 (8.35)	631 (17.05)
51—60	1 (1.47)	76 (7.55)	2 (2.35)	58 (9.13)	3 (2.94)	126 (9.5)	1 (1.47)	56 (7.60)	7 (2.16)	316 (8.54)
60+	— (0.0)	23 (2.29)	— (0.00)	24 (3.77)	— (0.00)	68 (5.1)	— (0.00)	20 (2.71)	— (0.00)	135 (3.64)
	68(6.76)		85(13.38)		102(7.70)		68(9.22)		323 (8.73)	3700

TABLE 3. Break up by sex of acute psychosis Vs. total attending facility

Centre	Bikaner		Goa		Patiala		Vellore		All centres	
	Acute psycho- sis N=68	Total psycho- sis N=1005	Acute psycho- sis N=85	Total psycho- sis N=635	Acute psycho- sis N=102	Total psycho- sis N=1323	Acute psycho- sis N=68	Total psycho- sis N=737	Acute psycho- sis N=323	Total psycho- sis N=3700
Male	39 (57.35)	705 (70.15)	49 (57.65)	327 (51.50)	58 (56.86)	735 (55.56)	30 (44.12)	417 (56.58)	176 (54.48)	2184 (59.00)
Female	29 (42.65)	300 (29.85)	36 (42.35)	308 (48.50)	44 (43.14)	588 (44.44)	38 (55.88)	320 (43.42)	147 (45.52)	1516 (41.00)

TABLE 4. Acuity of onset

Centre Onset	Bikaner N=68	Goa N=85	Patiala N=102	Vellore N=68	Allcentres Q323
Acute less than 48 hrs.	32 (47.00)	71 (83.52)	32 (31.37)	39 (57.35)	174 (53.86)
Acute 48 hrs. to 1 week	23 (33.82)	14 (16.47)	47 (46.08)	21 (30.88)	105 (32.52)
Subacute 1 to 2 weeks	13 (19.12)	0 (0.00)	23 (22.55)	8 (11.77)	44 (13.62)

$$X^2 = 56.02 \quad \text{d.f.} = 6, p < .05$$

TABLE 5. Psychosis whether reactive or not

Centre Reactive or not	Bikaner N=68	Goa N=85	Patiala N=102	Vellore N=68	All centres N=323
Reactive	15 (22.06)	16 (18.82)	19 (18.63)	10 (14.71)	60 (18.58)
Possibly reactive	17 (24.99)	16 (18.82)	29 (28.43)	32 (47.06)	94 (29.10)
Not reactive	36 (52.94)	53 (62.35)	54 (52.94)	26 (38.24)	169 (52.32)

$$X^2 = 16.25, \text{ d.f.} = 6, p < .05$$

TABLE 6. Presence of somatic/physiological stress

Centre Somatic stress	Bikaner N=68	Goa N=85	Patiala N=102	Vellore N=68	All centres N=323
Yes	18 (26.47)	18 (21.18)	45 (44.12)	16 (23.53)	97 (30.03)
No	48 (70.58)	67 (78.82)	55 (53.92)	51 (75.0)	221 (68.42)
Uncertain	2 (2.95)	0 (0.00)	2 (1.96)	1 (1.47)	5 (1.55)

$$X^2 = 14.58, \text{ d.f.} = 3, p < .05$$

TABLE 7. Nature of somatic/physiological stress

Centre Nature of physiological stress	Bikaner N=68	Goa N=85	Patiala N=102	Vellore N=68	All centres N=323
Feterile illness	9	7	34	7	57 (17.65)
Injury/accident	1	1	1	1	4 (1.24)
Childbirth	7	2	9	7	25 (7.74)
Other illness operation	1	8	1	1	11 (3.41)
Total	18 (26.47)	18 (21.18)	45 (44.11)	16 (23.5)	97 (30.03)

TABLE 8. Presence of mental stress

Centre Mental stress	Bikaner N=68	Goa N=85	Patiala N=102	Vellore N=68	All centres N=32
Present	33 (48.53)	46 (54.12)	46 (45.09)	35 (51.47)	160 (49.5)
Absent	35 (51.47)	39 (45.88)	56 (54.90)	33 (48.53)	163 (50.5)

TABLE 9. Presence of symptoms reflecting stressful events

Symptom/Centre	Present	Absent	Uncertain	Total
Patiala	29(28.4)	68(66.6)	5 ( 4.9)	102
Goa	22 (25.9)	57 (67.0)	6 ( 7.0)	85
Bikaner	16 (23.5)	49 (72.0)	3 ( 4.4)	68
Vellore	17(25.0)	27 (39.7)	24 (35.3)	68
Total	84 (26.0)	201 (62.2)	38 (11.8)	323 (100)

TABLE 10. History of previous psychiatric illness

Centre [ Illness	Bikaner N=68	Goa N=85	Patiala N=102	Vellore N=68	All centres N=323
Neurotic	1	6	6	4	17 (5.3)
Doubtful psychotic	—	1	2	1	4 (1.2)
Total	1 (1.48)	7 (8.24)	8 (7.84)	5 (7.35)	21 (6.5)

TABLE 11. Experiencing chronic difficulties in interpersonal relationship

Centre Chronic difficulties	Bikaner N=68	Goa N=85	Patiala N=102	Vellore N=68	All centres N=323
Yes	7 (10.29)	24 (28.24)	13 (12.75)	21 (30.88)	65 (20.12)
No	55 (80.88)	61 (71.76)	87 (85.29)	40 (58.82)	243 (75.23)
Uncertain	6 (8.83)	0 (0.00)	2 (1.96)	7 (10.29)	15 (4.64)

$X^2=15.92$  d.f. = 3  $p<.05$

TABLE 12. Specific areas in which difficulties experienced

Centre	Bikaner N=68	Goa N=85	Patiala N=102	Vellore N=68	All centres N=323
Wife/husband	1	6	6	8	21
Family	10	14	8	9	41
Work	1	2	1	1	5
Others	—	4	1	3	8
Total	12	26	16	21	75

TABLE 13. History of drug/alcohol abuse

Centre Nature of drugs used	Bikaner N=68	Goa N=85	Patiala N=102	Vellore N=68	All centres N=323
Alcohol	4	10	6	4	24
Opium	—	—	3	—	3
Commalus	4	1	—	1	6
Total	8	11	9	5	33 (10.21)

TABLE 14. History of abnormal premorbid functioning

Centre	Bikaner N=68	Goa N=85	Patiala N=102	Vellore N=68	All centres N=323
Now participation in normal social activities	—	5	3	—	8
Active participation in deviant social activities	2	3	1	—	6
Total	2	8	4	—	14 (4.33)

TABLE 15. Abnormal premorbid personality

Centre Abnormal premorbid personality	Bikaner N=68	Goa N=85	Patiala N=102	Vellore N=68	All centres N=323
Yes	11 (16.18)	24 (28.23)	20 (19.61)	29 (49.65)	84 (26.01)
No	54 (79.41)	61 (71.76)	80 (78.43)	38 (55.88)	233 (72.14)
Uncertain	3 (4.41)	0 (0.00)	2 (1.96)	1 (1.47)	10 (3.09)

 $\chi^2=15.84$  d.f. = 3,  $p<0.01$

TABLE 16. Premorbid personality traits

Centre Premorbid personality traits	Bikaner N = 68	Goa N = 85	Patiala N = 102	Vellore N = 68	All centres N = 323
Paranoid	—	—	—	1	1
Affective	—	9	3	—	12
Schyoid	8	7	3	5	23
Explosive	—	2	4	3	9
Obsessive	1	2	3	—	6
Hysteric	1	2	6	19	28
Asthemic	1	—	—	—	1
Psychopathic	—	2	1	1	4
Total	11	24	20	29	84
Percent	(16.2)	(28.2)	(19.6)	(42.6)	(26.0)

TABLE 17. History of mental illness in relatives

Centre Mental illness of relatives	Bikaner N=68	Goa N=85	Patiala N=102	Vellore N=68	All centres N=323
Yes	17 (25.0)	26 (30.59)	23 (22.55)	7 (10.29)	73 (22.6)
No	48 (70.59)	58 (68.24)	77 (75.49)	61 (89.71)	244 (75.54)
Uncertain	3 (4.41)	1 (1.17)	2 (1.96)	0 (0.00)	6 (1.86)

Table 18. ICD Diagnosis vs Mental illness in relatives : All centres

MUR/ICD	Yes	No/ uncertain	Total
Schizophrenia (295)	26 (23.0)	87	113
Manic Dep. Psy. (296)	27 (29.3)	65	92
298 (0—8)	17 (21.3)	63	80
Non Dep. Psych.—(298.9)	2 (6.5)	29	31
Others	1 (14.3)	6	7
Total	73 (22.6)	250 (77.4)	323 (100)

TABLE 19. ICMR Descriptive category Vs. Mental illness in relatives all centres

MIIR (ICMR Des. category)	Yes	No/uncertain	Total
Predominantly depressed type	6 (15.0)	34	40
Predominantly elated	6 (27.3)	16	22
Predominantly withdrawn	7 (17.5)	33	40
Predominantly excited	26 (28.3)	66	92
Predominantly paranoid	14 (20.3)	55	69
Predominantly confusional	1 (14.3)	6	7
Predominantly hysterical	3 (13.0)	20	23
Possession type	2 (50.0)	2	4
Mixed type	5 (23.8)	16	21
Others	23 (60.0)	52	5
Total	73 (22.6)	250 (77.4)	323 (100.0)

TABLE 20. Relationship with mentally ill relative

Centre	Bikaner N=68	Goa N=85	Patiala N=102	Vellore N=68	All centres N=323
Father	4	3	5	1	13 (4.0%)
Mother	9	13	6	2	30 (9.3%)
Brother	5	12	9	2	28 (8.6%)
Sister	1	2	8	4	15 (4.6%)
Son	1	—	1	—	2 (0.6%)
Daughter	1	—	1	—	2 (0.6%)
Total	21	30	30	9	90
Percentage	30.9	35.3	29.4	13.2	27.9

TABLE 21. History of living with mentally ill person

Centre Living with mental patient	Bikaner N = 68	Goa N = 85	Patiala N = 102	Vellore N = 68	All centres N = 323
Yes	6 (8.82)	12 (14.12)	4 (3.92)	0 (0.00)	22 (6.81)
No	59 (86.75)	72 (84.71)	97 (95.09)	66 (97.06)	294 (91.02)
Uncertain	3 (4.41)	1 (1.18)	1 (0.98)	2 (2.94)	7 (2.17)

$\chi^2 = 13.82$ , d.f. = 3,  $p = 0.05$ .

TABLE 22. Culturally identifiable minority group

Centre	Bikaner N = 68	Goa N = 85	Patiala N = 102	Vellore N = 28	All centres N = 323
SC	3	1	6	6	16
BC	2	—	—	2	4
Other Telugu & Marwari Nepali	1	—	—	2	3
Total	6	1	6	10	23 (7.0%)

TABLE 23. Social functioning prior to initial contact Vs. I.C.D. Diagnosis

I.C.D. social functioning	Schizo- phrenics	M.D.P.	Other non- org. psy.	Others	Total
Un-impaired by illness	25 (50.0%)	8 (16.0%)	15 (30.0%)	2 (4.0%)	50 (16.0%)
Mildly impaired by illness	45 (38.0%)	36 (30.0%)	39 (33.0%)	0 (0.00%)	120 (37.0%)
Severely impaired	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Impossible to assess	43 (28.0%)	48 (31.0%)	57 (37.0%)	5 (3.0%)	153 (47.0%)
Total	113	92	111	7	323

TABLE 24. I.C.M.R. Descriptive Categories by centre

I.C.M.R. descriptive categories	Bikaner N=68 %	Goa N=85 %	Patiala N=102 %	Vellore N=68 %	All centres N=323 %
1. Predominantly depressed type	5.9	11.8	17.7	11.8	11.8
2. Predominantly elated type	14.4	8.2	0.0	4.4	4.2
3. Predominantly withdrawn type	14.7	14.1	6.9	16.2	12.9
4. Predominantly excited type	42.7	28.2	24.5	20.6	29.0
5. Predominantly paranoid type	22.1	27.1	22.5	11.8	20.8
6. Predominantly confusional type	1.5	1.2	1.8	1.5	2.0
7. Predominantly hysterical type	5.9	3.5	2.0	20.6	8.0
8. Possession type	0.0	1.2	3.9	1.5	2.0
9. Fixed type	1.5	2.4	9.8	11.8	6.3
10. Others	1.5	2.4	1.0	1.5	1.6

TABLE 25. I.C.M.R. Description category vs. Stressful events

Category	Yes	No	Uncertain	Total
1	17 (11.72)	18 (11.69)	5 (20.83)	40
2	12 (8.28)	9 (5.84)	1 (4.17)	22
3	12 (8.28)	27 (17.53)	1 (4.17)	40
4	42 (28.97)	44 (28.57)	6 (24.99)	92
5	29 (19.99)	37 (24.03)	3 (12.49)	69
6	4 (2.76)	3 (1.95)	0 (0.00)	7
7	2 (14.48)	0 (0.00)	2 (8.33)	23
8	1 (0.69)	3 (1.95)	0 (0.00)	4
9	5 (3.45)	12 (7.79)	4 (16.67)	21
10	2 (1.38)	1 (0.65)	2 (8.33)	5
Total	145 (100.0)	154 (100.0)	24 (100.0)	323

Table 26. I.C.D. Diagnosis by centre (Initial)

Diagnosis (at inclusion)	Bikaner N=68 %	Goa N=85 %	Patiala N=102 %	Vellore N=68 %	All centres N=323 %
Schizophrenia	58.8	32.9	28.4	26.5	35.6
M.D.P.	11.8	30.6	27.5	26.5	24.8
Other non-organic psychosis	29.4	29.4	44.0	42.6	36.8
Others and unspecified	0.0	7.1	0.0	4.4	2.8

Table 27. I.C.D. Diagnosis (at 1 year F.U.) by centre

I.C.D. diagnosis (at 1 year F.U.)	Bikaner N=68	Goa N=68	Patiala N=102	Vellore N=68	All centres N=323
Schizophrenia	34 (50.0%)	31 (36.5%)	28 (27.5%)	20 (29.4%)	113 (34.9%)
M.D.P.	7 (10.3%)	26 (30.5%)	34 (33.3%)	25 (36.8%)	92 (28.5%)
Other non-organic psychosis	27 (39.7%)	24 (28.3%)	40 (39.2%)	20 (29.4%)	111 (34.3%)
Others and unclassified	0 (0.0%)	4 (4.7%)	0 (0.0%)	3 (4.4%)	7 (2.2%)

Table 28. I.C.D. Diagnosis (Initial) versus I.C.M.R. descriptive categories

I.C.M.R. descriptive category	Schizoph- renia	M.D.P.	Other N.O. psychosis	Others and unspecified
1. Predominantly depressed type	1.7	23.8	16.0	0
2. Elated type	0.0	17.5	6.7	0
3. Withdrawn type	29.6	1.3	4.2	0
4. Excited type	23.5	42.5	26.05	0
5. Paranoid type	33.0	3.8	16.8	88.9
6. Confusional type	3.5	0.0	16.8	0
7. Hysterical type	0.0	0.0	16.8	0
8. Possessive type	1.7	1.2	0.8	0
9. Mixed type	4.4	10.0	6.7	0
10. Others	2.6	0.0	0.8	11.1

Table 29. Treatment compliance by centre

Treatment compliance	Bikaner N = 68 %	Goa N = 85 %	Patiala N = 102 %	Vellore N = 68 %	All centres N = 323 %
Full treatment	72.0	96.5	81.4	92.7	85.8
Partial treatment	23.5	2.3	11.8	7.4	10.8
Untreated	4.4	1.2	6.9	0.0	3.4

Table 30. I.C.D. Diagnosis and treatment by Neuroleptics

	Yes	No	Uncertain
Schizophrenic (N=113)	109 (96.46)	2 (1.77)	2 (1.77)
M.D.P. (N=92)	68 (73.91)	23 (25.0)	1 (10.09)
Other non-organic psychosis (N=111)	97 (87.39)	12 (10.81)	2 (1.80)
Others (N=7)	3 (42.86)	0 (0.00)	4 (57.14)

Table 31. I.C.D. Diagnosis and treatment by antidepressants

Antidepressant/I.C.D. Diagnosis	Yes	No	Uncertain
Schizophrenic (N=113)	5 (3.42)	107 (94.69)	1 (0.89)
M.D.P. (N=92)	27 (29.35)	62 (67.39)	3 (3.26)
Other non-organic psychosis (N=111)	14 (12.61)	97 (87.39)	0 (0.00)
Others (N=7)	1 (14.29)	2 (28.57)	4 (57.14)

Table 32. I.C.D. Diagnosis and treatment by other psycho-active agents

	Yes	No	Uncertain
Schizophrenia (N=113)	12 (10.62)	100 (88.49)	1 (0.89)
M.D.P. (N=92)	6 (6.52)	85 (92.39)	1 (1.09)
Other non-organic psychosis (N=111)	15 (13.51)	96 (86.49)	0 (0.00)
Others (N=7)	1 (14.29)	2 (28.57)	4 (57.14)

Table 33. Acute psychosis percentage of symptoms present by centre

Sr. No.	Symptoms	Bikaner N=68	Goa N=85	Patiala N=102	Vellore X <sup>2</sup> N=68	
1.	Worrying	0.00	0.00	0.00	0.00	—
2.	Tension & anxiety	41.18	35.29	18.63	33.82	11.58
3.	Loss of appetite	66.18	47.06	46.08	22.06	26.89*
4.	Delayed sleep	22.06	24.71	46.08	29.41	14.69*
5.	Early wakening	88.24	80.00	93.14	51.47	48.25*
6.	Loss of libido	1.47	10.59	0.00	1.47	—
7.	Depressed mood	29.41	47.06	42.16	32.35	66.45*
8.	Hopelessness	8.82	29.41	30.39	14.71	15.73*
9.	Suicidal plans	1.47	7.06	13.73	8.82	8.25
10.	Self-depreciating thought	8.82	27.69	21.57	8.82	14.70*
11.	Subjective anergia and retardation	16.18	10.59	39.22	13.24	28.99
12.	Diurnal variation	4.41	4.71	8.82	1.47	4.71
13.	Expansive mood	16.18	30.59	37.25	16.18	14.18*
14.	Subjective ideomotor pressure	16.18	32.94	49.02	16.18	29.63*
15.	Grandiose ideas and actions	17.65	28.24	17.65	16.18	4.79
16.	Irritability	61.76	67.06	68.62	86.76	11.82*
17.	Social withdrawal	16.18	47.06	45.09	57.35	26.24
18.	Phobias	0.00	1.17	5.88	0.00	10.04

(Contd.)

(Table 33 *Contd.*)

1	2	3	4	5	6	7
19. Obsession or compulsions	0.00	8.24	8.82	1.47	9.84	
20. Ideas of reference	5.88	3.53	4.90	26.47	30.44*	
21. Negative symptoms	30.88	8.24	22.55	19.12	12.92*	
22. Loss of interest	14.71	84.71	54.90	51.47	74.62*	
23. Lack of initiative	16.18	75.29	55.88	50.00	54.07	
24. Decreased ability to enjoy	11.76	67.06	49.02	32.35	51.93	
25. Difficulties in concentration	32.35	78.82	76.47	60.29	45.15	
26. Memory difficulties	8.82	25.88	68.63	11.76	92.6*	
27. Loss of energy	10.29	36.47	50.00	17.65	37.5	
28. De-realization	1.47	7.06	10.78	1.47	9.42*	
29. Depersonalization	2.94	4.71	8.82	2.94	4.12	
30. Changed perception	0.00	2.35	11.76	0.00	20.55	
31. Thought insertion	1.47	1.18	0.00	0.00	2.29	
32. Thought broadcast	1.47	0.00	0.00	0.00	3.76	
33. Thought echo or commentary	0.00	0.00	0.00	0.00	—	
34. Thought block	0.00	0.00	0.00	0.00	—	
35. Delusion of thought being real	1.47	1.18	2.94	1.47	1.60	
36. Auditory nonverbal	52.94	40.00	19.61	0.00	57.2*	
37. Verbal hallucination based on affects	7.35	24.71	13.73	5.88	14.6*	
38. Voices speaking to subjects	26.47	20.00	7.84	11.76	12.64*	
39. Voices speaking about subject	5.82	4.71	2.94	4.41	0.899	
40. Dissociative hallucination	0.00	1.18	4.90	0.00	—	
41. Visual hallucination	11.76	18.82	20.59	0.00	16.74*	
42. Delusions of control	4.41	2.35	3.92	1.47	1.38	
43. Delusions of reference	80.88	54.12	68.63	16.47	53.9*	
44. Delusions of persecution	55.88	65.88	67.65	16.18	51.72*	
45. Grandiose delusions	11.76	21.18	41.18	4.41	38.33*	
46. Religious delusions	2.94	15.29	18.63	0.00	21.31*	
47. Sexual delusions	1.47	2.35	0.00	2.94	2.83	
48. Hypochondriacal delusions	1.47	1.18	1.96	0.00	1.32	
49. Delusions of guilt	0.00	1.18	6.86	1.47	9.45	
50. Other delusions	0.00	34.12	35.29	1.47	56.15	

*Contd.*

Table 33 *Contd.*

1	2	3	4	5	6	7
51. Disorientation		4.41	8.24	6.86	0.00	5.91
52. Clouding of consciousness		11.76	2.35	5.88	1.47	9.25*
53. Dissective state		0.00	4.71	3.92	5.88	3.76
54. Other		2.94	1.18	0.00	0.00	4.64
55. Agitation or excitement		73.53	43.53	44.12	69.12	24.33*
56. Over-activity		54.41	35.29	53.92	48.53	8.06
57. Retardation		22.06	22.35	33.34	27.94	3.89
58. Stupor		1.47	9.41	2.94	2.94	7.43
59. Hysterical-histrionic behaviour		5.88	17.65	5.88	45.59	53.45
60. Inappropriate or bizarre		69.11	61.18	53.92	76.47	10.12*
61. Anxiety		67.65	32.94	62.75	20.59	47.58
62. Depression		25.00	31.76	44.12	29.41	7.96
63. Elation		17.65	21.18	42.16	17.65	19.63
64. Hostile irritability		64.71	40.00	61.76	47.06	13.59
65. Suspicion		80.88	35.29	63.73	19.12	66.9*
66. Perplexity		51.47	27.06	50.98	16.18	30.72
67. Lability of mood		19.12	5.88	12.75	32.35	20.83*
68. Blunted affect		7.35	1.18	13.73	17.65	13.99*
69. Apathy		2.94	2.35	7.84	8.82	4.93
70. Slow speech		19.12	8.23	32.35	32.35	19.3*
71. Muteness		14.71	23.53	1.96	16.18	19.68*
72. Pressure of speech		26.47	35.29	49.02	25.00	13.82*
73. Flight of ideas		14.71	22.35	43.14	11.76	18.99
74. Irrelevant, vague, idiosyncratic, tangential speech		67.65	34.12	35.29	26.47	29.03
75. Other observed disorders		2.94	7.06	3.92	0.00	5.41
76. Lack of insight		96.08	81.18	95.59	89.71	14.39
77. Autism		5.88	18.82	7.84	1.47	15.73
78. Poor emotional rapport		86.76	68.23	47.06	77.94	34.32
79. Poor intellectual rapport		67.65	34.12	35.29	26.47	29.03*
80. Symptoms reflecting stressful events		2.94	7.06	3.92	0.00	5.41

\* Indicates significant difference at p m.05

Table 34. Acute psychosis percentage of symptoms present by diagnostic categories

Sr. No.	Symptoms	Schizophrenia	M.D.P.	Other X <sup>2</sup> non-org. psy.
		(295) n = 115	(296) n = 80	(298) n = 119
1.	Worrying	0.00	0.00	0.00
2.	Tension & anxiety	30.43	31.25	31.09
3.	Loss of appetite	52.17	42.50	42.02
4.	Delayed sleep	39.13	51.25	21.01*
5.	Early wakening	78.26	92.5	75.63*
6.	Loss of libido	3.48	6.25	1.68
7.	Depressed mood	34.78	43.75	40.34
8.	Hopelessness	15.65	32.50	22.69
9.	Suicidal plans	4.35	18.75	7.56*
10.	Self-depreciating thought	8.69	26.25	16.81*
11.	Subjective anergia and retardation	14.78	31.25	21.01
12.	Diurnal variation	0.00	17.5	2.52*
13.	Expansive mood	8.69	61.25	22.68*
14.	Subjective ideomotor pressure	13.91	61.25	29.41*
15.	Grandiose ideas and actions	9.57	47.50	13.45*
16.	Irritability	59.13	90.00	72.27*
17.	Social withdrawal	53.91	40.00	32.77*
18.	Phobias	3.48	2.5	0.84
19.	Obsessions or compulsions	5.22	3.75	6.72
20.	Ideas of reference	0.86	7.5	19.33*
21.	Negative symptoms	11.30	21.25	18.49
22.	Loss of interest	60.00	56.25	46.22
23.	Lack of initiative	64.35	52.5	38.66*
24.	Decreased ability to enjoy	52.17	43.75	33.61*
25.	Difficulties in concentration	58.26	88.75	55.46*
26.	Memory difficulties	33.04	38.75	28.57
27.	Loss of energy	31.17	37.5	26.89
28.	De-realization	8.69	3.75	5.04
29.	Depersonalization	8.69	5.00	2.52

Contd.

Table 34 *Contd.*

1	2	3	4	5
30.	Changed perception	2.61	6.25	4.20
31.	Thought insertion	0.87	1.25	0.00
32.	Thought broadcast	0.87	0.00	0.00
33.	Thought echo or commentary	0.00	0.00	0.00
34.	Thought block	0.00	0.00	0.00
35.	Delusion of thought being real	3.48	0.00	0.84
35.	Audiotory, non-verbal	38.26	16.25	27.73*
37.	Verbal hallucination based on affects	10.43	8.75	19.33*
38.	Voices speaking to subject	21.73	12.50	11.76*
39.	Voices speaking about subject	5.22	2.5	0.84
40.	Dissociative	1.74	2.5	0.84
41.	Visual hallucination	20.00	10.00	10.08*
42.	Delusions of control	6.09	3.75	0.00
43.	Delusions of reference	51.30	45.00	43.70
44.	Delusions of persecution	57.39	58.75	47.89
45.	Grandiose delusions	11.30	45.00	18.49*
46.	Religious delusions	6.09	21.25	8.40*
47.	Sexual delusions	3.48	1.25	0.00
48.	Hypochondriacal delusions	0.87	90.00	0.84
49.	Delusions of guilt	2.6	3.75	2.52
50.	Other delusions	23.48	11.25	24.37
51.	Dis. orientation	5.22	2.5	6.72
52.	Clouding of consciousness	6.96	1.25	5.88
53.	Dissociative state	1.74	2.5	6.72
54.	Other	0.87	2.5	0.00
55.	Agitation or excitement	40.00	67.5	63.87*
56.	Over-activity	29.56	65.00	63.87*
57.	Retardation	35.65	36.25	14.29*
58.	Stupor	6.09	3.75	3.36*
59.	Hysteriform-histrionic behaviour	7.83	17.5	27.73*
60.	Inappropriate or bizarre	66.96	68.75	60.50
61.	Anxiety	47.83	46.25	48.74

*Contd.*

Table 34 *Contd.*

1	2	3	4	5
62.	Depression	24.35	56.25	27.73*
63.	Elation	9.57	52.5	26.05*
64.	Hostile irritability	43.48	70.00	54.62*
65.	Suspicion	53.91	50.00	49.58
66.	Perplexity	47.83	26.25	35.29*
67.	Lability of mood	10.43	16.25	23.53*
68.	Blunted affect	23.48	5.00	0.84
69.	Apathy	13.04	2.50	0.84
70.	Slow speech	31.30	35.00	9.24*
71.	Muteness	22.61	8.75	8.40*
72.	Pressure of speech	17.39	62.5	37.82*
73.	Flight of ideas	12.17	38.75	30.25*
74.	Irrelevant, vague, idiosyncratic tangential speech	53.04	27.5	36.97*
75.	Other observed disorders	5.22	3.75	1.68
76.	Lack of insight	131.30	40.00	87.39*
77.	Autism	15.65	7.50	3.36
78.	Poor emotional rapport	75.65	67.5	61.34
79.	Poor intellectual rapport	53.04	27.5	36.97*
80.	Symptoms reflecting stressful events	5.22	3.75	1.68

\* Indicates significant difference at  $p < .05$

Table 35. Outcome at 1 year

Outcome	No	%age
1. Full remission and no psychotic relapse	245	75.9
2. Full remission and one psychotic relapse	28	8.7
3. Full remission and more than one psychotic relapse	3	0.9
4. No full remission, residual symptoms persisted	28	8.7
5. Still in index episode	19	5.9

Table 36. Final outcome versus centre

	Patiala	Goa	Bikaner	Vellore	Total
FOC-1	77 (75.49)	69 (81.18)	49 (72.06)	50 (73.53)	245 (75.85)
FOC-2	11) )11.76	8) )11.76	1) )1.47	8) )11.76	28) )9.60
FOC-3	1)	2)	0)	0)	3)
FOC-4	7) )12.75	6) )7.06	6) )26.47	9) )14.71	28) )14.55
FOC-5	6)	0)	12)	1)	19)
Total	102	85 (100.0)	68 (100.0)	68 (100.0)	323 (100.0)

Table 37. Outcome versus age

Age Outcome	15-20	21-30	31-40	41+
1	92 (80.70)	101 (75.37)	30 (73.17)	22 (64.71)
2,3	9 (7.89)	6 (4.48)	7 (17.07)	9 (26.47)
4,5	13 (11.41)	27 (20.15)	4 (9.76)	3 (8.82)
Total	114	134	41	34

Table 38. Duration of illness

Duration of illness/ outcome	1 weeks	2 weeks	3 weeks	4 weeks	Total
1	149 (80.98)	62 (72.09)	23 (69.70)	11 (55.0)	245
2,3	11 (5.98)	12 (13.95)	4 (12.12)	4 (20.0)	31
4,5	24 (13.04)	12 (13.95)	6 (18.18)	5 (25.0)	47
Total	184	86	33	20	323



Table 39. Previous episode versus outcome

Previous episode outcome			Total
	No	Yes	
1	234 (77.48)	11 (57.89)	245
2,3	25 (8.28)	6 (31.58)	31
4,5	43 (14.24)	2 (10.53)	45
Total	302	19	321

(Information on two cases were not available).

Table 40. Acuity of onset versus outcome

Onset outcome	Acute less than 48 hours	Acute from 48 hours to one week	Sub acute 1 to 2 weeks	Total
1	143 (82.18)	78 (74.28)	24 (54.55)	245
2,3	15 (8.62)	7 (6.67)	9 (20.45)	31
4,5	16 (9.20)	20 (19.05)	11 (25.00)	47
Total	174	105	44	323

Table 41. Final outcome versus treatment compliance

outcome \ Treatment				
	Completely	Partially	No	Total
FOC-1	218 (78.70)	18 (51.43)	9 (81.82)	245 (75.86)
FOC-2	25) (10.11)	3) (8.57)	0) (0.00)	28) (9.59)
FOC-3	3)	0)	0)	3)
FOC-4	27) (11.19)	1) (40.0)	0) (18.18)	28) (14.55)
FOC-5	4)	13)	2)	19)
Total	277 (100.0)	35 (100.0)	11 (100.0)	323 (100.0)

Table 42. Final outcome versus I.C.D. diagnosis (1 year P.U.)

outcome \ I.C.D. Diag.	Schizophrenia	M.D.P.	Other	Others & unspecified	Total
1	74 (65.49)	69 (75.0)	96 (86.49)	6 (85.71)	245 (75.85)
2	3) (8.85)	17) (18.48)	2) (2.70)	1) (14.29)	28) (9.59)
3	2)	0)	1)		3)
4	17) (25.66)	3) (6.52)	8) (10.81)		28) (14.55)
5	12)	3)	4)	0)	19)
Total	113 (100.0)	92 (100.0)	111 (100.0)	7 (100.0)	323 (100.0)

Table 43. Final outcome versus (I.C.M.R. descriptive category

	Depressed	Plated	with drawn	Excited	Paranoid	Confusional	Hysterical	Possession	Mixed	Others	Total %
FOC-1 complete recovery	23 (57.50)	20 (90.90)	30 (75.0)	69 (75.0)	54 (78.26)	5 (71.42)	20 (86.96)	3 (75.0)	18 (85.71)	3 (60.0)	245 (75.85)
FOC-2 Full remission with 1 relapse	7 (17.5)	2 (9.09)	3 (7.5)	10 (10.87)	4 (5.79)	1 (14.29)	1 (4.35)	0 (0.00)	0 (0.00)	0 (0.00)	28 (8.67)
FOC-3 full remission with more than 1 relapse	1 (2.5)	0 (0.0)	1 (2.5)	0 (0.0)	1 (1.45)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	3 (0.93)
FOC-4 No complete remission residual symptoms	5 (12.5)	0	4 (10.0)	8 (8.70)	5 (7.24)	0	2 (8.69)	1 (25.0)	2 (9.52)	1 (20.0)	28 (8.67)
FOC-5 still in inclusion episode	4 (10.0)	0	2 (5.0)	5 (5.43)	5 (7.24)	1 (14.29)	0 (0.0)	0 (0.00)	1 (4.76)	1 (20.0)	19 (5.88)
Total	40 (100.0)	22 (100.0)	40 (100.0)	92 (100.0)	69 (100.0)	7 (100.0)	23 (100.0)	4 (100.0)	21 (100.0)	5 (100.0)	323 (100.0)

Table 44. Outcome at 3 MTS, 6 MTS and 1 year by centres

Centre Outcome	Bikaner			GOA			Patiala			Vellore		
	3 MTS	6 MTS	1 yr	3 MTS	6 MTS	1 yr	3 MTS	6 MTS	1 yr	3 MTS	6 MTS	1 yr
1	47	49	49	69	72	68	78	81	78	40	47	51
2	—	1	1	4	4	6	1	3	11	—	5	6
3	—	—	—	—	—	2	—	—	1	—	—	—
4	8	6	6	10	8	9	9	8	7	22	12	9
5	13	12	12	2	1	—	14	10	5	6	4	2
Total	—	68	—	—	85	—	—	102	—	—	68	—

Table 45. Symptom versus outcome

Outcome Symptom		1 N=245	2 N=28	3 N=3	4 N=28	5 N=19
1	2	3	4	5	6	7
1. Worrying		0	0	0	0	0
2. Tension and anxiety		65 (26.5)	7 (24.9)	1 (33.3)	16 (57.1)	11 (57.9)
3. Loss of appetite (wt.)		110 (44.9)	8 (28.6)	1 (33.3)	16 (57.1)	12 (63.2)
4. Delayed sleep		69 (28.2)	12 (42.9)	1 (33.3)	15 (53.6)	6 (31.6)
5. Early wakening		197 (80.4)	20 (71.4)	2 (66.7)	21 (74.9)	18 (94.7)
6. Loss of libido		9 (3.7)	1 (3.6)	0	1 (3.6)	0
7. Depressed mood		91 (37.1)	11 (39.3)	1 (33.3)	13 (46.4)	9 (47.4)
8. Hopelessness		51 (20.8)	9 (32.1)	0	9 (32.1)	3 (15.8)
9. Suicidal planer acts		17 (6.9)	5 (17.9)	1 (33.3)	2 (7.1)	2 (10.5)
10. Self-depreciation thoughts		34 (13.9)	8 (28.6)	0	7 (24.9)	3 (15.8)
11. Subjective anergia & Metardation		49 (20.0)	7 (24.9)	1 (33.3)	9 (32.1)	3 (15.8)
12. Diurnal variation		14 (5.7)	2 (7.1)	0	0	1 (5.3)
13. Expansive mood		68 (27.8)	9 (32.1)	0	6 (21.4)	3 (15.8)
14. Subjective ideoms tor pressure		78 (31.8)	12 (42.9)	0	6 (21.4)	4 (21.1)
15. Grandiose ideas and actions		51 (20.8)	7 (24.9)	0	4 (14.3)	3 (15.8)
16. Irritability		174 (71.02)	19 (67.9)	3 (100.0)	21 (74.9)	11 (57.9)
17. Social withdrawal		103 (42.0)	11 (39.3)	2 (66.7)	15 (53.6)	5 (26.3)
18. Phobias		2 (0.82)	2 (7.1)	1 (33.3)	1 (3.6)	1 (5.3)

Contd.

Table 45 *contd.*

1	2	3	4	5	6	7
19. Obsessions or compulsions		12 (4.9)	2 (7.1)	0	3 (10.7)	0
20. Ideas of reference		26 (10.6)	1 (3.6)	0	3 (10.7)	0
21. Negative symptom		42 (17.1)	2 (7.1)	1 (33.3)	4 (14.3)	3 (15.8)
22. Loss of interest		132 (53.9)	15 (53.6)	3 (100.0)	15 (53.6)	8 (42.1)
23. Lack of initiative		123 (50.2)	16 (57.1)	3 (100.0)	16 (57.1)	8 (42.1)
24. Decreased ability to enjoy		96 (39.2)	15 (53.5)	3 (100.0)	15 (53.6)	8 (42.1)
25. Difficulties in concentration		156 (63.7)	21 (74.9)	2 (66.7)	18 (64.3)	11 (57.9)
26. Memory difficulties		76 (31.0)	11 (39.3)	2 (66.7)	9 (32.1)	8 (42.1)
27. Loss of energy		74 (30.2)	10 (35.7)	2 (86.7)	10 (35.7)	5 (26.3)
28. De-realization		18 (7.3)	0	0	1 (3.6)	0
29. Depersonalization		15 (6.12)	1 (3.6)	0	0	1 (5.3)
30. Changed perception		12 (4.9)	1 (3.6)	0	0	1 (5.3)
31. Thought insertion		1 (0.41)	1 (3.6)	0	0	0
32. Thought broadcast		0	0	0	0	1 (5.3)
33. Thought echo or commentary		0	0	0	0	0
34. Thought block		0	0	0	0	0
35. Dehesion of thought being head		5 (2.0)	0	0	1 (3.6)	0
36. Auditory non-verbal		66 (26.9)	6 (21.4)	0	9 (32.1)	9 (47.4)
37. Verbal hallucination based on affect or voices calling subjects		32 (13.1)	4 (14.3)	0	5 (17.9)	3 (15.8)

*Contd.*

Table 45 *Contd.*

1	2	3	4	5	6	7
38.	Voices speaking to subjects	35 (14.3)	2 (7.1)	0	9 (32.1)	5 (26.3)
39.	Voices speaking about subject	13 (5.3)	0	0	0	1 (5.3)
40.	Dissociative hallucination	4 (1.6)	1 (3.6)	0	1 (3.6)	0
41.	Visual hallucinations	37 (51.2)	3 (10.7)	0	2 (7.1)	3 (15.8)
42.	Delusions of control	9 (3.7)	0	0	0	1 (5.3)
43.	Delusions of references	111 (45.3)	17 (60.7)	2 (66.7)	13 (46.4)	8 (42.1)
44.	Delusions of persecution	126 (51.4)	17 (60.7)	2 (66.7)	14 (49.9)	15 (78.9)
45.	Grandiose delusions	56 (22.9)	8 (28.6)	0	6 (21.4)	1 (5.3)
46.	Religious delusions	25 (10.2)	4 (14.3)	0	1 (3.6)	1 (5.3)
47.	Sexual dehesions	25 (10.2)	4	0	3	2
47.	Sexual dehesions	2 (0.82)	1 (3.6)	0	1 (3.6)	1 (5.3)
48.	Hypochondrical delusions	3 (1.2)	1 (3.6)	0	0	0
49.	Dehesions of guilt	5 (2.0)	3 (10.7)	0	1 (3.6)	0
50.	Other delusions	55 (22.4)	2 (7.1)	1 (33.3)	7 (24.9)	1 (5.3)
51.	Disorientation	14 (5.7)	1 (3.6)	0	0	2 (10.5)
52.	Clouding of conciousness	12 (4.9)	0	0	1 (3.6)	4 (21.1)
53.	Dissociative state	11 (4.5)	0	0	1 (3.6)	0
54.	Other	2 (0.82)	0	0	1 (3.6)	0
55.	Agitation or excitement	139 (56.7)	12 (42.9)	2 (66.7)	14 (49.9)	12 (63.2)

*Contd.*

Table 45 *Contd.*

1	2	3	4	5	6	7
56. Overactivity		120 (48.9)	13 (46.4)	1 (33.3)	13 (46.4)	8 (42.1)
57. Retardation		62 (25.3)	8 (28.5)	2 (66.7)	9 (32.1)	6 (31.6)
58. Stupor		11 (4.9)	1 (3.6)	1 (33.3)	0	1 (5.3)
59. Hysteriferon hystrionic behaviour		45 (18.4)	2 (7.1)	0	8 (28.6)	1 (5.3)
60. Inappropriate or bizarre		158 (64.5)	17 (60.7)	2 (66.7)	17 (60.7)	12 (63.2)
61. Anxiety		114 (46.5)	10 (35.7)	0	13 (46.4)	15 (78.9)
62. Depression		75 (30.6)	12 (42.9)	1 (33.3)	13 (46.4)	8 (42.1)
63. Elation		68 (27.8)	8 (28.6)	0	4 (14.3)	51 (26.3)
64. Hostile irritability		131 (53.5)	14 (49.9)	1 (33.3)	17 (60.7)	10 (52.6)
65. Suspicion		125 (51.0)	13 (46.4)	1 (33.3)	12 (42.9)	12 (63.2)
66. Perplexity		90 (36.7)	10 (35.7)	2 (66.7)	8 (28.6)	11 (57.9)
67. Lability of mood		43 (17.6)	1 (3.6)	0	5 (17.9)	4 (21.1)
68. Blunted affect		22 (8.9)	3 (10.7)	1 (33.3)	3 (10.7)	3 (15.8)
69. Apathy		13 (5.3)	1 (3.6)	1 (33.3)	1 (3.6)	2 (10.5)
70. Slow speech		53 (21.6)	7 (24.9)	0	9 (32.1)	6 (31.6)
71. Muteness		33 (13.5)	2 (7.1)	2 (66.7)	5 (17.9)	1 (5.3)
72. Pressure of speech		91 (37.1)	12 (42.9)	0	6 (21.4)	6 (31.6)
73. Flight of ideas		62 (25.3)	9 (32.1)	0	5 (17.9)	5 (26.3)
74. Irrelevant vague ideasyneratic speech		101 (41.2)	6 (21.4)	1 (33.3)	9 (32.1)	12 (63.2)

*Contd.*

Table 45 *contd.*

1	2	3	4	5	6	7
75. Other observed disorders		5 (2.0)	3 (10.7)	0	1 (3.6)	3 (15.8)
76. Lack of insight		225 (91.8)	21 (74.9)	2 (66.7)	26 (92.9)	19 (100.0)
77. Autism		22 (8.9)	4 (14.3)	1 (33.3)	0	2 (10.5)
78. Poor emotional rapport		168 (68.6)	15 (53.6)	2 (66.7)	19 (64.9)	14 (73.7)
79. Poor intellectual rapport		173 (70.6)	16 (57.1)	3 (100.0)	18 (64.3)	14 (73.7)
80. Symptoms reflecting stressful events		63 (25.7)	5 (17.9)	1 (33.3)	10 (35.7)	15 (26.3)

## Outcome:

- 1 = Full remission, and no psychotic relapse  
 2 = Full remission and one psychotic relapse  
 3 = Full remission and more than one psychotic relapse  
 4 = No full remission, residual symptoms persisted  
 5 = Still in the index episode.

Table 46. Catego classes of acute psychosis patients

Catego class		No.	%
Schizophrenic psychosis	S+	66	20.43
	O+	19	5.88
Manic and mixed affective psychosis	M+	60	18.58
Paranoid psychosis	P+	18	5.57
Depressive psychosis	D+	23	7.12
	R+	18	5.57
Uncertain psychotic (S?, P?, M?, D?, O?) classes		70	21.67
Other classes A, H, X		6	1.86
More than one Catego class		43	13.32
Total		323	100.00

Table 47. I.C.D. clinical diagnosis versus I.C.D. Catego Diagnosis

I.C.D. Catego I.C.D. Clinical	295	296	298 (0-8)	298.9	Others	Total
295	48	33	2	—	23	106
296	17	43	4	1	8	73
298						
(0-8)	10	45	—	—	9	64
298.9	10	13	—	—	7	30
Others	5	2	—	—	2	9
Total	90	136	6	1	49	282

Total cases 282—Remaining 41 cases were unclassified by catego.

Table 48. First 15 symptoms in order of frequency seen in patients not classified by catego and in total sample of Acute Psychosis

Symptoms	Unclassified Acute psychoses N = 161	Total sample Acute psychoses N = 323
1. Delusions of persecution	44.09%	51.39%
2. Harfulness/Suspicious	42.85	49.75
3. Delusion of reference	34.16	42.52
4. Auditory verbal hallucinations	29.81	33.90
5. Depressed Mood	29.81	37.74
6. Psychomotor retardation	28.57	26.42
7. Vague tangential, idiosyncratic speech	26.70	40.88
8. Agitation or excitement	24.84	57.57
9. Pressure of speech	13.04	33.94
10. Anxiety	13.04	45.98
11. Grandiose ideas and actions	9.93	19.93
12. Expansive mood	9.31	25.05
13. Histrionic behaviour	9.31	18.75
14. Autism	6.21	8.50
15. Penplicity	5.59	36.42

## REFERENCES

1. Collomb, H. (1965) Assistance Psychiatrique on Afrique Experience Senegalaise) *Psychopahtol afr.* (1:11-84 (91)
2. Constant, J. (1969) Les Bouffes delirantes en Guadeloupe. These. *Universite de Paris* (94 : 101, 103).
3. Ey, H. (1954) Etudes Psychiatriques, vol. 3, Structure Des. Psychoses aiguës at destrucdraton de Ta conscience, Brouwer, Paris ((92 : 101).
4. Ey, H. (1958) les problem cliniques des Schizophrenics, *Evol. Psychiatr.* 2, 149 : 212 (94 : 101).
5. Faergman, P.M. (1963) Psychogenic Psychoses, London : Butterworchs.
6. Fogelson *et al* (1982) A study of DSM III Schizophreiform disorder. *Am. J. Psychiat.* vol. 139. No. 10 Oct. 1982.
7. Jaspers, K. (1913) Allgemeine Psychopathologie : General Pschyopathology. Transplanted by J. Hoenig and M.W. Hamilton, Manchester University Press, 1963.
8. Kapur, R.L. and Pandurangi, A.K. (1979) A comparative study of Reactive Psychosis and Acute Psychosis without precipitating stress. *British J. Psychiat.* (133, 544-560).
9. Kasanin J. (1933) The acute schizoaffective psychosis. *Am. J. Psychit*, 13, 97.
10. Lambo, T.A. (1965) Schizophrenia and borderline states. Transcultural Psychiatry (ends. A.V.S. de Reuck and Ruth Porter) Ciba foundation Symposium, Churchill, London.
11. Langfeldt, G. (1937) The Prognosis in Schizophrenia and the factors influences the course of disease. *Acta. Psychiat. Scand. Suppl.* 13, 1.
12. Leonhard, K. (1961) Cycloid Psychoses : Endogenous Psychoses which are neither Schizophrenia nor manic depressive *J. Ment. Sci.*, 107, 633.
13. MC. Cabe., M.S. Fowler, R.C., Cadoret, R.J. and Winokur G. (1972). Symptom differences in Schizophrenia with good and poor prognosis. *Amer J. Psy.*, 128, 1239.
14. McCabe, M.S. (1975) Reactive Psychoses. A clinical and genetic Investigation—Monograph. *Acta Psychiatric Scandanavia. Supplementum* 259. Munsgaard, Gopenhagen.
15. McCabe, M.S., Strongren, E. (1975) Reactive Psychoses. A family study. *Arch. Gen. Hospital*, 32, 447.
16. Mitusda, H. (1965) The concept of Atypical Psychosis from the aspect of clinical genetics. *Acta Psychiat. Scand.*, 41, 372.
17. Murphy, Henry, B.M. (1982) Comparative Psychiatry : The International and intercultural distri-bution of mental illness (91-114).
18. Overbeck—Wright, A.W. (1921) Lunacy in India, Chapman London (93).
19. Pope, Jr., H.G. Lipnski, Jr. J.F. (1973) Diagnosis in Schizophrenia and Manic Depressive Illness. A reassessment of specificity of Schizophrenic symptoms in the light of current research. *Arch. Gen. Psy.* (35, 811).
20. Singh, G., Sachdeva, J.S. (1980) A clinical and follow up study of Atypical Psychosis. *Indian J, Psychiat.* (1980) 22, 167-172.

21. Singh, G. Sachdeva, J.S. (1982) Schizo-affective Psychosis; are they Schizophrenics?. *Indian J. Psychiat.* (1982) **24**(1), 42-48.
22. Skiliar, N., Starikowa, K. (1929) Zur Vergleichenden Psychiatric, *Arch. Psychiatr. Nervenkr.* **88**, 554-585 (29-91).
23. W.H.O. (1979) Schizophrenia : An international follow up study. Wiley, New York.
24. Wig, N.N. and Singh, G. (1967) A proposed Classification of Psychiatric disorder for use in India. *Indian Journal of Psychiatry*, **9**, 158.
25. Wimmer, A. (1916). Psychogenic forms of Insanity (in Danish) Gad. Gopenhagen (Skt. Hans Hospital's Jubilee Publication) pp 85-216 (93).
26. Wing., J.K., Cooper, J.E. and sartrious, N. (1974) The measurement and classification of chiatric symptoms : 9th edition : Cambridge University Press.

**INDIAN COUNCIL OF MEDICAL RESEARCH**  
**Collaborative Study on Phenomenology and Natural History of Acute Psychosis**  
(Schedule for Clinical Assessment of Acute Psychotic States)

Name of Patient.....

Address (complete address to be noted down)

(a) Local address .....

.....

(b) Permanent address .....

.....

.....

Identification number of the patient in the facility.....

(1-3) Job Number

1	3	4
---	---	---

(4-5) Card design

1	1
---	---

(6) Name of centre

(Key : Patiala 1, Goa 2 Bikaner, V, Vellore 4)

☐

(7-8) Card number

0	1
---	---

(9-11) Patient's ICMR serial number

☐ ☐ ☐

(12-13) Psychiatrist who rated the schedule

☐ ☐

Name.....

☐

(14) Was this schedule filled as a part or reliability interview ?

(Key : Yes 1, 2)

☐

(15-16) Psychiatrist who interviewed the patient

☐ ☐

Name.....

(17-18) Age of patient (years)

☐ ☐

(19) Sex of patient

(Key : Male 1, Female 2)

☐

(20) Blank

☐

Date    Month    Year

(21-26) Date when it was filled

--	--	--	--	--	--	--

- (27) Marital status ☐  
 (Key : Single/Never married 1, married 2, separated 3, divorced 4, widowed 5, other 6, unknown 9)
- (28) Educational status ☐  
 (Key : Illiterate 1, literate but not attended any school 2, completed primary 3, completed middle 4, completed secondary 5, technical after secondary 6, college 7, and other, 8, unknown 9)
- (29-30) Blank ☐ ☐
- sources of information used to fill in this schedule  
 (Key : Yes 1, No 2)
- (31) Interview with patient ☐
- (32) Interview with key informant ☐
- (33) Interview with more than one informant ☐
- (34) Other sources ☐

**PART A—SCREENING PROFORMA : GIVEN SEPARATELY**

**PART B—PSYCHIATRIC HISTORY AND SOCIAL DESCRIPTION**

On the basis of your assessment of this patient; please answer the following question:

- B.1 (53) How many days prior to the patient's initial assessment was the onset of psychiatric symptoms described in part A? ☐
- B.2 (54) It this the first episode of any mental illness (including neurotic disorder) this patient has ever had? ☐

(Key: Yes 1, No 2, Uncertain 9)

B.2.1 If no, specify when earlier episode occurred, describe briefly their nature and how they were treated.

B.3. (55) How rapid was the onset of psychotic symptoms ?



(Key : Acute onset, one or more psychotic symptoms appeared within days (upto a week); no psychotic symptoms in the preceding three months 1

Acute onset of one or more psychotic symptoms (within days, upto a week) but existence of other non-psychotic symptoms in the preceding 3 months likely or certain 2

Sub-acute onset, psychotic symptoms developed over a period of upto one month; existence of psychiatric symptoms in the preceding three months can be safely excluded 3

Sub-acute onset, psychotic symptoms developed over a period of upto one month; previous existence of other, non-psychotic symptoms in the preceding three months likely or certain 4

Available information inadequate for making any judgement about mode of onset 9

B.4 (56) Was the onset of this episode of mental illness preceded, within three months by any event which of the patient experienced as stressful, threatening or humiliating ?

(Key : Yes 1, No 2, Uncertain 9)

B.4. 1 (57-58) If yes, how many weeks ago ?  
(If uncertain 9)



B.4.2 If yes, specify nature and event

B.5 (59) Was the onset of episode of mental disorder preceded, within three months by any physiological, or somatic stress like infectious disease, fever of any sort, injury, exhaustion, other physical disease, child birth etc.?

(Key : Yes 1, No 2, Uncertain 9)





B.5.2 If yes, specify nature of physiologic or somatic strain



B.6.1 If yes, specify nature of problem

Drugs      Alcohol

☐      ☐

Key :	Yes,	1
	No.	2
	Suspicion only	3
	Not known	9

B.7.1 If yes, specify nature of abuse

B.8 (65) Is there any evidence of abnormal premorbid personality traits in this patient.



(Key : Yes 1, No 2, Uncertain 9)

B.8.1 If yes, describe such traits

B.9 (66) Is there any evidence of abnormal premorbid social functioning in patients history i.e.(i) nonparticipation in appropriate roles and activities expected of a 'normal' person in the patients socio-cultural context and or (ii) participation in deviant 'social activities or roles as generally defined by other members in this society.



(Key : yes 1, No 2, Uncertain 9)

B.9.1 If yes, describe abnormal functioning

B.10 (67) Is there any evidence of mental disorder in any of the first degree relatives of this patient (father, mother, siblings, children (including sibling) regardless of whether living or dead ?



(Key : Yes 1, No 2, Uncertain 9)

B.10.1 If yes specify which relatives and nature of disorder if known

B.11 (68) Is this patient living with a person suffering from mental disorder (whether related or not) ?



(Key : Yes 1, No 2, Uncertain)

B.11.1 If yes give details.

B.12 (69) Rate the patient's socio economic standing with regard to the catchment area population :



- Key :
1. Highest level
  2. Above average
  3. Average
  4. Below average (economically disadvantaged but not destitute)
  5. the poorest group (i.e. poverty stricken, destitute)
  6. Uncertain/unknown

B.13 (70) Is the patient a member of any culturally identifiable minority group (e.g. caste, ethnic, racial group etc.) ?



(Key : Yes 1, No 2, Uncertain 9)

B.13.1 If yes, specify group

- B.14 (71) Is there any evidence of other socio-economic, cultural or demographic factors that distinguish the patient from an "average" member of his/her society or socio-cultural environment ? ☐

B.14.1 If yes, please describe such factors

- B.15 (72) Religion

Key :	Hindu	1	Christian	4
	Sikh	2	Buddhist	5
	Muslim	3	Others	6

- B.16 (73) Caste—Name ☐

(Key : S.C./S.T. 1, Other 2)

- B.17 (74) Occupation ☐

(Key : 1 Cultivator  
2 Labourer  
3 Household work  
4 Student  
5 Business and professional  
6 None  
7 Others)

- B.18 (75-76) State of origin ☐

## PART C—SYMPTOM CHECK LIST

### INSTRUCTIONS

The following check list should be filled in on the basis of a mental state assessment, including an examination of the patient a review of the case records and if possible an interview with a key informant.

Most items corresponds to PSE items whose number, according to the 9th edition, are given in brackets, and they are defined by the PSE glossary of definition 9th edition.

The rating should be : 1 definitely present during the specified period of time.  
 2 not present  
 9 unknown or uncertain

No symptom should be rated as present unless there is clear evidence to support such rating. The rater should utilise all available information to make a best estimate about the appropriate ratings. For every symptom rated as present a description should be provided on the opposite page.

Col. No	Symptoms	Anytime in the 2 weeks prior to initial assessment	Initial assessment (within 48 hours)	SCAAPS										
				1 wks	2 wks	3 wks	4 wks	5 wks	6 wks	3 mth	6 mths	1 year		
(30-40)	C.1 Worrying (3)	(1) <input type="checkbox"/>	(2) <input type="checkbox"/>	(3) <input type="checkbox"/>	(4) <input type="checkbox"/>	(5) <input type="checkbox"/>	(6) <input type="checkbox"/>	(7) <input type="checkbox"/>	(8) <input type="checkbox"/>	(9) <input type="checkbox"/>	(10) <input type="checkbox"/>	(11) <input type="checkbox"/>		
(41-51)	C.2 Tension & anxiety (7,8,10,11-17)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
C.3 Appetite, sleep & libido														
(52-62)	3.1 Loss of appetite (weight) (34)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
(63-73)	3.2 Delayed sleep (35)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
(1-8)	<div style="border: 1px solid black; padding: 5px; display: flex; justify-content: space-between;"> <span>1</span> <span>3</span> <span>4</span> <span>2</span> <span>1</span> <span>0</span> <span>2</span> </div>													





Col. No.	Symptoms	Anytime in the last 2 weeks initial assessment	Initial assessment 48 hours	SCAAPS (in weeks)																	
				1 wks	2 wks	3 wks	4 wks	5 wks	6 wks	3 mth	6 mths	1 year									
(65-75)	9.1 De-realization (47)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
(1-8)	<table><tr><td>1</td><td>3</td><td>4</td><td>2</td><td>1</td><td>0</td><td>7</td></tr></table>	1	3	4	2	1	0	7													
1	3	4	2	1	0	7															
(21-31)	9.2 Depersonalization (48)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
(32-42)	9.3 Changed perception	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
	C.10 Subjectively experienced thought disorders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
(43-53)	10.1 Thought insertion (55)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
(54-64)	10.2 Thought broadcast (56)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
(65-75)	10.3 Thought echo or commentary (57)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
(1-8)	<table><tr><td>1</td><td>3</td><td>4</td><td>2</td><td>1</td><td>0</td><td>8</td></tr></table>	1	3	4	2	1	0	8													
1	3	4	2	1	0	8															
(21-31)	10.4 Thought block (58)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
(32-42)	10.5 Delusion of thoughts being read (59)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							

C.11 Hallucinatory preceptual  
disorders (hallucinations  
and pseudohallucinations)





[illegible]

Col. No.	Symptoms	Anytime in the last 2 weeks prior to initial assessment	Initial assessment (within 48 hours)	SCAAPs (in weeks)										
				1 wks	2 wks	3 wks	4 wks	5 wks	6 wks	3 mth	6 mths	1 year		
(32-42)	C.17 Other observed disorders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	C.18 Overall impression													
(43-53)	18.1 Lack of insight (104)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(54-64)	18.2 Autism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(65-75)	18.3 Poor emotional rapport	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(1-8)	1   3   4   2   1   1   7													
(21-31)	18.4 Poor Intellectual rapport	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(32-42)	C.19 Symptoms reflecting stressful events or situation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

stressful events or situation

If any symptoms are rated under C. 19 as present list below the identification number of the symptom (e.g. delusions of persecution — C. 6.3) and write a brief narrative note about the manner in which each symptom is linked to a stressful event (e.g. through denial, delusional context, psychomotor activity, etc.)

## NOTES ON SYMTOMS

## PART D—INITIAL ASSESSMENT & DIAGNOSTIC EVALUATION

### INITIAL ASSESSMENT

- D. 1 Upon completion of initial clinical assessments of this case at the end of one week write in the space provided below your diagnostic assessment, using the descriptive diagnostic categories listed below and defined in the glossary.

Key for main diagnostic categories :

- |                                 |                                  |
|---------------------------------|----------------------------------|
| 1 Predominantly depressed type  | 2 Predominantly elated type      |
| 3 Predominantly withdrawn type  | 4 Predominantly excited type     |
| 5 Predominantly paranoid type   | 6 Predominantly confusional type |
| 7 Predominantly hysterical type | 8 Possession type                |
| 9 Mixed type                    | 10 Others                        |

(30-31) D-1 Main diagnostic category ☐☐

(32) D-2 Reactive or not ☐  
 Key : Rating 1, Reactive 2, Possibly Reactive 3  
 Non-Reactive 4

D-3 1. C.D.—9 Diagnosis

(33-36) D-3.1 Main diagnosis 

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(37-40) D-3.2 Alternative Diagnosis 

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(41-44) D-3.3 Supplementary Diagnosis 

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### D-4 ASSESSMENT AT SIX WEEKS

Upon completion of 6 weeks clinical assessment of this case at the end of 6 weeks (or at the time of discharge if earlier), please write in the space provided below your diagnostic assessment. The same key and codes used under initial assessment should be used.

(44-45) D-4.1 Main Diagnostic category ☐☐

(46) D-5 Reactive or not ☐

D-6 I.C.D. 9 Diagnosis \_\_\_\_\_

(47-50) D-6.1 Main I.C.D. Diagnosis

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(51-54) D-6.2 Alternative I.C.D. Diagnosis

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(55-58) D-6.3 Supplementary Diagnosis

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### ASSESSMENT AT 1 YEAR

D-7 Upon completion of one year follow-up clinical assessment of the case. Please write in the space provided below your diagnostic assessment.

(59-69) D-8

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(62) D-7 Reactive or not

D-9 I.C.D. 9 Diagnosis

☐

(62-65) D-9 1 I.C.D. 9 Main Diagnosis

--	--	--	--

(66-69) D-9 2 I.C.D. 9 Alternative Diagnosis

--	--	--	--

(70-73) D-9 3 I.C.D. 9 Supplementary Diagnosis

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### PART E—TREATMENT, COURSE AND OUTCOME

(TO BE FILLED IN UPON FOLLOW-UP EXAMINATION)

E. 1 Please code the treatment which this patient has received :

(a) during the inclusion episode and upto 3 months after initial assessment

(b) in the period between the 3 months follow-up and the 1—year follow up

(Yes 1, No 2, Uncertain 9)

3 mths 6 mths 1 yr

(30-33) Neuroleptic (major tranquillizers)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

(34-36) Antidepressants

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

(37-39) Other psychoactive agents

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

specify \_\_\_\_\_ D \_\_\_\_\_

3 mths 6 mths 1 yr

(40-45) ECTU(specify number)

--	--	--	--	--	--	--	--

- (46-48) E 2 What was the total duration (in weeks) of the inclusion episode after the initial assessment of this patient took place ? (code 777 is inclusion episode continuing into the present ; 999 if unknown).

--	--	--

- (49-51) E.3 Did the patient ever achieve a full clinical remission (return to his premorbid state), lasting for at least 30 days, at any time after the inclusion episode ? (Operational definition of the term "remission")

3 mths 6 mths 1 yr  
☐ ☐ ☐

0 no full remission; residual symptoms persisted  
 1 full remission; 8 not applicable, the patient is still in the index episode; 9 uncertain

- (52-57) E. 4 If patient remitted from the inclusion episode, how many psychotic relapses did he have since then upto the present moment ?

3 mths	6 mths	1 yr

(00 no relapses ; 88 not applicable; 99 uncertain, patient did not remit from index episode)

(i.e. number of additional psychotic episode following the patients remission from the inclusion episode of the disorder. For an operational definition of the term "psychotic episode" see operational definitions

Note : Each psychotic episode must be followed by a 30 day period of remission before a new psychotic episode can be assumed to have begun).

(00 no relapse; 88 not applicable; 99 uncertain, patient did not remit from ... index episode)

- (58-63) E.5 If patient experienced a remission from the index episode, for how many weeks was he taking maintenance psychotropic medication after remission began ?

3 mths	6 mths	1 yr

(00 no relapse; 88 not applicable; 99 uncertain, patient did not remit from index episode)

- (64-66) E. 6 Rate the patient's level of social functioning over the last 30 days.
- |   | 3 mths                   | 6 mths                   | 1 yr                     |
|---|--------------------------|--------------------------|--------------------------|
| 0 social functioning un-impaired by illness   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 social functioning mildly impaired by illness. Only one important sphere of social life impaired to a moderate degree throughout the period, or severe impairment for less than half of the period. |                          |                          |                          |
| 3 social functioning severely impaired by illness. Severe impairment in one or more important spheres of social life throughout the whole period.   |                          |                          |                          |
| 9 impossible to assess.   |                          |                          |                          |
- (67-69) E. 7 How does the patient's current level of social functioning (i.e. last 30 days) compare to the patient's usual level of social functioning in the 12 month period immediately preceding the inclusion episode.
- |                                | 3 mths                   | 6 mths                   | 1 yr                     |
|--------------------------------|--------------------------|--------------------------|--------------------------|
| 0 better or about the same     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 some change for the worse    |                          |                          |                          |
| 2 serious change for the worse |                          |                          |                          |
| 9 not known                    |                          |                          |                          |

**PART F—INITIAL EXAMINATION NARRATIVE SUMMARY**

Please describe the relevant features of this patient's illness, previous personality, past history, social environment, treatment, course and outcome.

### THREE MONTH EXAMINATION NARRATIVE SUMMARY

Describe in a succinct factual narrative the patient's progress since his/her initial examination.

### SIX MONTH EXAMINATION NARRATIVE SUMMARY

Describe in a succinct factual narrative the patient's progress since his/her 3 month examination.

### ONE YEAR EXAMINATION SUMMARY NARRATIVE

Describe in a succinct factual narrative the patient's progress his/her 6 month examination.

## APPENDIX V

### INDIAN COUNCIL OF MEDICAL RESEARCH

#### Collaborative Study on Phenomenology and Natural History of Acute Psychosis

#### PRESENT STATE EXAMINATION

#### SCORE-SHEET

Name of Patient \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_

(1-5) Job Number

--	--	--	--	--

(6) Name of centre  
(Key : Patiala 1, Goa 2,  
Bikaner 3, Vellore 4)

☐

(7-9) Patient's ICMR serial number

--	--	--

(10-13) Patient's facility number

--	--	--	--

(14-15) Psychiatrist who rated the schedule

--	--

Name \_\_\_\_\_

(16) Was this schedule filled as a part of reliability  
interview ?

☐

(Key : Yes 1, No 2)

(17-19) Psychiatrist who interviewed the patient

--	--	--

Name \_\_\_\_\_

(20-25) Date when it was filled

Date	Month	Year

(26) Sex of patient (Key : Male, 1, Female 2)

☐

(27-28) Age of patient

--	--

IMPORTANT NOTE : THIS SCORE SHEET SHOULD BE USED IN CONJUNCTION WITH THE PSE (9th EDITION) INTERVIEW SCHEDULE. Unless otherwise stated in the PSE schedule the following codes should be used :

- |               |                  |
|---------------|------------------|
| 0—Not present | 8—Not applicable |
| 1—Moderate    | 9—Not known      |
| 2—Severe      |                  |

Time : Past four weeks

Card 1

Card 1

**1. Introduction**

Patient's account of symptoms  
(see 140)

Reasons for inadequacy (tick as  
many as appropriate)

Denial or guardedness

...

Incoherence

...

Irrelevance

...

Replies too brief

...

Poverty of content of speech

...

Inattention

...

Refusal

...

Patient mute, stuporous, etc.

...

Other, specify

...

..... cut off.....

**2. Health, Worrying, Tension**

1. (30) Subject's own subjective  
evaluation of present  
physical health ☐

2. (31) Presence of physical ill-  
ness or handicap ☐

**2. Health, Worrying, Tension  
*cont.*)**

3. (32) Psychosomatic symptoms ☐

4. (33) Worrying ☐

5. (34) Tension pains ☐

6. (35) Tiredness or exhaustion ☐

7. (36) Muscular tension ☐

8. (37) Restlessness ☐

9. (38) Hypochondriasis ☐

10. (39) Subjective feeling of  
'Nervous tension' ☐

10a. (40) Hypersensitivity to noise ☐

**3. Autonomic anxiety**

11. (41) Free-floating autonomic  
anxiety ☐

12. (42) Anxious foreboding with  
autonomic accompani-  
ments ☐

13. (43) Autonomic anxiety due  
to delusions, etc. ☐

.....cut off .....

N.B. The numbers listed conform to the PSE symptom number, Ninth edition, May 1973.

## Card 1

14. (44) Panic attacks with autonomic symptoms ☐
15. (45) Situational autonomic anxiety ☐
16. (46) Autonomic anxiety on meeting people ☐
17. (47) Specific phobias (not general situational anxiety) ☐
18. (48) Avoidance of anxiety provoking situations ☐

**4. Thinking, concentration, etc.**

19. (49) Subjectively inefficient thinking ☐
20. (50) Poor concentration ☐
21. (51) Neglect due to brooding ☐
22. (52) Loss of interest ☐
- .....cut off.....

**5. Depressed mood**

23. (53) Depressed mood ☐
24. (54) Hopelessness (Subject's own view at present) ☐
25. (55) Suicidal plans or acts ☐
- .....cut off.....
26. (56) Anxiety or depression primary ☐
27. (57) Morning depression ☐

**6. Self and others**

28. (58) Social withdrawal ☐
29. (59) Self-depreciation ☐
30. (60) Lack of self-confidence with other people (in social relationships) ☐

## Card 1

31. (61) Simple ideas of reference (not delusions) ☐
- .....cut off.....

32. (62) Guilty ideas of reference ☐
33. (63) Pathological guilt ☐

**7. Appetite, sleep, retardation, libido**

34. (64) Loss of weight due to poor appetite ☐
35. (65) Delayed sleep ☐
36. (66) Subjective anergia and retardation ☐
- .....cut off.....

37. (67) Early waking ☐
38. (68) Loss of libido (within present episode of illness and persisting during past month) ☐

39. (69) Premenstrual exacerbation ☐

**8. Irritability**

40. (70) Irritability ☐

**9. Expansive mood and ideation**

41. (71) Expansive mood (not ordinary high spirits) ☐
42. (72) Subjective ideomotor pressure ☐
- .....cut off.....

43. (73) Grandiose ideas and actions ☐

**10. Obsessions**

44. (74) Obsessional checking and repeating ☐

	Card 1		Card 2
45. (75) Obsessional cleanliness and similar rituals	<input type="checkbox"/>	60. (32) Non-verbal auditory hallucinations	<input type="checkbox"/>
46. (76) Obsessional ideas and rumination	<input type="checkbox"/>	61. (33) Verbal hallucinations based on depression or elation or voice calling subject	<input type="checkbox"/>
<b>11. Derealisation and depersonalisation</b>		62. (34) Voice (s) discussion subject in third person or commenting on thoughts or actions (not based on depression or elation)	<input type="checkbox"/>
47. (77) Derealisation	<input type="checkbox"/>	63. (35) Voice (s) speaking to subject (not based on depression or elation)	<input type="checkbox"/>
48. (78) Depersonalisation	<input type="checkbox"/>	64. (36) Dissociative hallucinations (verbal and/or other)	<input type="checkbox"/>
	Card 2	65. (37) Pseudo-and(or true hallucinations	<input type="checkbox"/>
<b>12. Other perceptual disorders (not hallucinations)</b>		<i>14B. Visual Hallucinations</i>	
49. (21) Delusional mood .....cut off.....	<input type="checkbox"/>	.....cut off.....	
50. (22) Heightened perception	<input type="checkbox"/>	66. (38) Visual hallucinations	<input type="checkbox"/>
51. (23) Dulled perception	<input type="checkbox"/>	67. (39) Delirious visual hallucinations	<input type="checkbox"/>
52. (24) Changed perception	<input type="checkbox"/>	<i>14C. Other Hallucination</i>	
53. (25) Changed perception of time, including dejavu	<input type="checkbox"/>	.....cut off.....	
54. (26) Lost emotions	<input type="checkbox"/>	68. (40) Olfactory hallucinations	<input type="checkbox"/>
<b>13. Thought reading, insertion, echo</b>		69. (41) Delusion that subject smells	<input type="checkbox"/>
<b>Broad cast</b>		70. (42) Other hallucinations and delusional elaboration	<input type="checkbox"/>
.....cut off.....		<b>15. Delusions</b>	
55. (27) Thought insertion	<input type="checkbox"/>	.....cut off.....	
56. (28) Thought broadcast	<input type="checkbox"/>	<i>15A. Delusion of Control</i>	
57. (29) Thought echo or commentary	<input type="checkbox"/>	71. (43) Delusions of control	<input type="checkbox"/>
58. (30) Thought block of withdrawal	<input type="checkbox"/>		
59. (31) Delusion of thoughts being read	<input type="checkbox"/>		
<b>14. Hallucinations</b>			
.....cut off.....			
<i>14A. Auditory Hallucinations</i>			

## Card 2

*15B. Misinterpretations, Misidentification and Delusions of Reference*

72. (44) Delusions of reference ☐
73. (45) Delusional Misinterpretation and misidentification. ☐

*15C. Delusions of Persecution*

74. (46) Delusions of persecution ☐

*15D. Expansive Delusions*

75. (47) Delusions of assistance ☐
76. (48) Delusions of grandiose abilities ☐
77. (49) Delusions of grandiose identity ☐

*15E. Delusions Concerning Various Types of Influence and Primary Delusions*

78. (50) Religious delusions
79. (51) Delusional explanations in terms of paranormal phenomena ☐
80. (52) Delusional explanations in terms of physical forces ☐
81. (53) Delusions of alien forces penetrating or controlling mind (or body) ☐
82. (54) Primary delusions ☐

*15F. Other Delusions*

83. (55) Subculturally influenced delusions ☐
84. (56) Morbid jealousy ☐
85. (57) Delusion of pregnancy ☐
86. (58) Sexual delusions ☐

## Card 2

87. (59) Fantastic delusions, delusional memories, delusional confabulations ☐

*15G. Simple Delusions Based on Depersonalisation, Hypochondriasis, etc.*

88. (60) Delusions of guilt ☐
89. (61) Simple delusions concerning appearance ☐
90. (62) Delusion of depersonalisation ☐
91. (63) Hypochondriacal delusions ☐
92. (64) Delusion of catastrophe ☐

*15H. General Ratings of Delusions and Hallucinations*

93. (65) Systematisation of delusions ☐
94. (66) Evasiveness ☐
95. (67) Preoccupation with delusions and hallucinations ☐
96. (68) Acting out delusions ☐

**16. Sensorium and factors affecting**

97. (69) Fugues, blackouts, amnesia lasting more than one hour ☐
98. (70) Drug abuse during month ☐
99. (71) Alcohol abuse during past month ☐
100. (72) Dissociative states during post month ☐
101. (73) Conversion symptoms ☐
102. (74) Clouding or stupor at examination ☐

## Card 2

103. (75) Organic impairment of memory ☐

**17. Insight**

104. (76) If psychotic symptoms (sections 12-15 only) ☐

105. (77) If neurotic symptoms (sections 1-11 only) ☐

106. (78) Social impairment due to neurotic condition ☐

107. (79) Social impairment due to psychotic condition ☐

## Card 3

**18-20 Behaviour, Affect and Speech***Behaviour during interview*

108. (21) Self-neglect ☐

109. (22) Bizarre appearance ☐

110. (23) Slowness and underactivity ☐

111. (24) Agitation

112. (25) Gross excitement and violence ☐

113. (26) Irreverent behaviour ☐

114. (27) Distractability

115. (28) Embarrassing behaviour ☐

116. (29) Mannerisms and posturing ☐

117. (30) Stereotypies, etc. ☐

118. (31) Behaves as if hallucinated ☐

119. (32) Catatonic movements ☐

## Card 3

*Affect during interview*

120. (33) Observed anxiety ☐

121. (34) Observed depression ☐

122. (35) Histrionic ☐

123. (36) Hypomanic affect ☐

124. (37) Hostile irritability ☐

125. (38) Suspicion ☐

126. (39) Perplexity (puzzlement) ☐

127. (40) Lability of mood ☐

128. (41) Blunted affect ☐

129. (42) Incongruity of affect ☐

*Speech during interview*

130. (43) Slow speech ☐

131. (44) Pressure of speech ☐

132. (45) Non-Social speech ☐

133. (46) Muteness ☐

134. (47) Restricted quantity of speech ☐

135. (48) Neologism and idiosyncratic use of words or phrases ☐

136. (49) Incoherence of speech ☐

137. (50) Flight of ideas ☐

138. (51) Poverty of content of speech ☐

139. (52) Misleading answers ☐

140. (53) Re-rate adequacy of interview ☐

**INDIAN COUNCIL OF MEDICAL RESEARCH**  
**COLLOBORATIVE STUDY ON PHENOMENOLOGY & NATURAL**  
**HISTORY OF ACUTE PSYCHOSIS**

**Screening Criteria for Acute Psychotic States**

(Use Codes : Yes—1, No—2, uncertain—9)

---

Patient's name :

Age :

---

- |        |      |  |                          |
|--------|------|--|--------------------------|
| A. 1   | (35) | Patient's age between 15 and 50 years old  | <input type="checkbox"/> |
| A. 2   | (36) | Onset of symptoms within 1 month of initial assessment<br>If both rated '1' go on to A.3             | <input type="checkbox"/> |
| A. 3   |      | Check if the following features can be safely excluded in this case.                                 | <input type="checkbox"/> |
| A. 3.1 | (37) | Gross organic brain disorder.  | <input type="checkbox"/> |
| A. 3.2 | (38) | Epilepsy   | <input type="checkbox"/> |
| A. 3.3 | (39) | Mental retardation   | <input type="checkbox"/> |
| A. 3.4 | (40) | History of previous episode of psychotic illness.  |                          |
| A. 3.5 | (31) | Has been on continuous antipsychotic treatment for more than last one week                           | <input type="checkbox"/> |
| A. 3.6 | (42) | Residence beyond the defined catchment area<br>If all rated '2' go on to A. 4                        | <input type="checkbox"/> |
| A. 4   | (43) | A sudden onset of psychotic symptoms developing with days, upto 2 weeks<br>If rated '1' go on to A.5 |                          |
| A. 5   |      | Check if any of the following features are present in this case.                                     |                          |
| A. 5.1 | (44) | Hallucinations   | <input type="checkbox"/> |
| A. 5.2 | (45) | Delusions (any content)  |                          |
| A. 5.3 | (46) | Confusion or disorientation  | <input type="checkbox"/> |
| A. 5.4 | (47) | Grossly inappropriate or socially undesirable behaviour  | <input type="checkbox"/> |

- A. 5.5 (48) Marked excitement ☐
- A. 5.6 (49) Marked withdrawal ☐
- A. 5.7 (50) Marked Elation
- A. 5.8 (51) Marked depression ☐
- if any two or more rated '1'

Consider this patient eligible for inclusion. However, the presence of either hallucinations or delusions, even when present alone, would qualify the patient for inclusion.

Certain cases fulfilling only one of the above criteria may still be included if there is sufficient reason to believe that he/she is suffering from an 'acute' psychotic disorder. Such reasons should be specified below :

**This patient is provisionally included.**

Name of the interviewer

Date of assessment.

Case reviewed : Any auditional information

Name of interviewer.

Date

Case reviewed : Any additional information.

**This patient is included/excluded**

Name of interviewer :

Date of assessment :

### APPENDIX III

#### A. Operational definitions of inclusion Criteria

**Hallucination :** Hallucinations would be recorded as being present if patient has false but vivid sensory perceptions without external stimulation of the relevant sensory organ. There may or may not be delusional interpretation of the hallucinatory experience. Hallucinations would be recorded as being present if the subject claims to have seen, heard, tasted, smelt or felt sensations for which there is no convincing evidence. Hallucinations will also be recorded as being present if there is indirect evidence like subject seen in a listening attitude, talking aloud as if answering someone or looking frightened and in a defending attitude from his imaginary assailants. Hallucinations occurring in the course of an intensely shared religious experience or those related to sleep (hypnagogic and hypnopompic) will not be rated here.

**Delusions :** Delusion would be recorded as being present if patient has a false personal belief based on incorrect inference about external reality and which cannot be corrected by an appeal to the reason of the subject and which is out of harmony with the patient's education and surroundings. Beliefs based on cultural and religious norms and superstitions. Beliefs based on culture and religious norms and superstitions which are shared by other members of the community will not be rated as delusions. Fleeting suspicious, ideas lacking an un-shakable conviction will not be rated as delusions.

**Confusion or disorientation :** Confusion would be recorded as being present when the subject appears perplexed and has apparent difficulty in comprehending the environment. He appears unsure of his surroundings, and has difficulty in identifying time, place and person (not because of sensory deficits or loss of memory). Simple inattention from general lack of interest will not be recorded as disorientation.

**Grossly inappropriate or socially undesirable behaviour :** This will be recorded as being present when the subject performs actions which are grossly or markedly out of keeping with usually accepted norms of behaviour, Actions which are extremely odd and out of keeping with social norms will be recorded here i.e., grossly abusive, aggressive or destructive behaviours, tearing of clothes, or becoming undressed in presence of other persons, voiding in public etc. A person may show grossly inappropriate and socially undesirable behaviour in the absence of excitement or withdrawal. Only very gross disturbance of behaviour will be recorded here. Lesser changes in behaviour like talking excessively or talking less or slovenliness in dress and personal habits will not be considered here.

**Marked excitement :** It will be recorded as being present when the person shown marked over activity in verbal and motor areas, with the subject constantly talking, interfering running, jumping, gesticulating, shouting and scroaming and may at the times be aggressive and violent, needing restraint. Only gross excitement will be considered here. Milder forms of over-activity and volubility of speech will not be included. Only restlessness in which the subject cannot sit still or stand at one place but which is accompanied with subjective distress and an attempt on the patient's part to control himself will also not be included here.

**Marked withdrawal :** It will be recorded as being present when the subject shows a marked retrest from interpersonal contract and social involvement alongwith a concomitant decrease of intellectual and emotional interest in surroundings. It may also be accompanied by a severe degree of psychomotor retardation manifested as partial or complete stupor. Only gross forms of withdrawal will be included Milder degree a social withdrawal like shunning company and talking loss will not be included here.

**Marked elations:** It would be recorded as being present when the patient shows an excessively joyful affect with over-confidence which is not warranted by actual circumstances. There is usually an element of excitement, irritability or aggressive behaviour accompanying the elated mood. Mild or transient elation or euphoria will not be included.

**Marked depression :** It will be recorded as being present when the subject has extreme feeling of sadness, despair, low self-esteem, and self-reproach, accompanied either with restlessness or psychomotor retardation, with or without suicidal rumination or a history or an actual attempt at suicide. Only extereme form of depression will be included here. Mild farm of sadness, and being in low spirits will not be included.

## **B. Operational Definitions of descriptive diagnostic categories**

Irrespective of the diagnosis, depending upon the predominant clinical manifestation, each patient would be categorised as follows :

## APPENDIX VI

### **Report on statistical analysis of reliability exercise for the investigators and research officers on the P.S.E.**

In the meeting of the investigators and Research Officers of the above mentioned study held at Goa from 11th Nov., to 16th Nov., 81, the PSE Reliability exercise was carried out. The scoring sheets containing the ratings given by four investigators and four Research Officers on the same 6 patients interviewed and jointly rated were received at the IRMS for Statistical Analysis.

The objective of the PSE reliability was to determine the agreement in the ratings on the various items of the PSE by the different investigators.

#### **Statistical Method for data analysis**

The rating of the zero score was taken as zero. The rating of either 1, 2, 3, 4 or 5 were all included under the category of positives (+). The rating of 8 and 9 were taken ratings (i) between the four investigators (ii) between the four Research Officers and (iii) between the investigators and Research Officers.

(a) Either of the following categories were taken as the agreement between the four investigators/Research Officers ; 0000, + + + +, 8888, 9999.

(b) Any other combination of the ratings were all considered as disagreement.

All the 140 items included under the PSE were tabulated separately for each of the patients for the above combinations.

In order to understand the degree of agreement in the ratings of the items the crude index of Overall Agreement (OA) was calculated which is defined as follows :

$$OA = \frac{(0000) + (+ + + +) - (8888) + (9999)}{\text{Total items rated (140)}} \times 100$$

The above index of "OA" is purely a descriptive one. The "OA" index was calculated separately for each of the category of staff viz. (a) between investigators and Research Officers. This "OA" index was calculated for each of the patients as well as for all the six patients clubbed together.

More rigorous statistical method such as intra-class correlation for understanding the reliability was not employed.

## RESULTS

The results of analysis of data are described separately for each of the category.

### Inter-centre Agreement

#### (a) Agreement between the investigators

The crude index of overall agreement for each of the patients is presented in Table 'I' and 1b. It can be seen from tables that the crude index of overall agreement ranges from 88.57% to 96.43% for different patients. The highest disagreement was seen with respect to patient No. 1, whether the disagreement ratings were 11.43%. The next in the order was with respect to patient No. 3, the disagreement rating were 7.86%. For all the six patients combined together the overall agreement of crude index worked out to be 93.33% which can be taken as to satisfactory level of agreement.

It can be observed from the table that the disagreement was not confined to any particular centre and was distributed overall the centres :

#### (b) Agreement between the Research Officers

The crude index of agreement with regard to the various patients across the four research officers ranged from 97.14% to 73.57%.

The patient Nos. 5 and 3 showed a higher disagreement ratings. In other four cases the index of agreement was more than 93w. The overall index of agreement clubbed for all the six patients worked out to be 89.88%.

Even in case of research officers, the disagreement ratings were not concentrated with any one particular centre.

#### (c) Agreement between Research Officers & Investigators

The ratings for each of the items of PSE given by the four investigators and four Research Officers were considered simultaneously, and were classified into the agreement and disagreement rating groups as has been already explained. An agreement of more than 88% was present between the two teams of investigators with regard to patient No. 1, 4 and 6. However, patient 2nd, 3rd and 5th showed a lower percentage of agreement.

Table 1 P.S.E. Reliability Exercise :

**Acute Psychosis Study****Table 1.** Index of overall agreement among investigators Research Officers and Investigator and R.O.'s

Patient No.	% Index of overall agreement		
	Investigators	Research officers	Between Investigators & R.Os.
1	88.6	97.1	87.1
2	95.7	96.4	56.4
3	92.1	85.7	69.3
4	93.6	92.1	88.6
5	93.6	73.6	70.7
6	96.4	94.3	95.7
All patients	93.3	89.9	78.0

## APPENDIX VII

### I.C.M.R. Descriptive Diagnostic Categories

Each category is operationally defined as follows :—

#### 1. Predominantly depressed type

The predominant disturbance is that of mood towards sadness, gloom and wretchedness. Psychomotor activity may be reduced but there may be agitation and restlessness. Ideas of hopelessness, inadequacy and inferiority may be there and there may be history of suicidal rumination or even an actual suicidal attempt. Delusions and hallucinations if present are understandable in the context of depression.

If the clinical presentation is that of extreme withdrawal or stupor without elated or depressive mood being clearly evident the patient should be put in 'Predominantly withdrawal type.'

#### 2. Predominantly elated type

The predominant disturbance is that of mood towards marked elation, enhanced liveliness and joy, out of keeping with patient's actual circumstances. It will invariably be associated with pressure of speech and overactivity. Thinking and perceptual disturbances if present are understandable in the context of elated mood state.

If the clinical presentation is of extreme excitement or stupor without elated depressive mood being clearly evident, the patient should be put in 'Predominantly excited type'.

#### 3. Predominantly withdrawn type

The predominant disturbance is that of extreme degree of psychomotor retardation manifested as mutism or partial or-completed forms of stupor. Catatonic features may be prominent. Affective or thinking disturbance may be present, but the withdrawal remains the predominant clinical manifestation. Patients with predominant mood disorder, mild withdrawal will not be included here.

#### 4. Predominantly excited type

The predominant disturbances is that of extreme degree of verbal and motor activity with the subject constantly gesticulating, shouting, screaming, running resulting sometimes in aggression and violence. The excitement of such a degree that it requires restraint. Patients of depression with restlessness and patients of elation with only a mild overactivity will not be included here.

### **5. Predominantly paranoid type**

The most prominent clinical manifestation is a profusion of paranoid ideation that is characterized by delusions of persecution, influence, jealousy, or bodily change. Patients with sustained unshakeable grandiose delusions like those of exalted birth, in the absence of an elated mood will also be categorized here. Hallucinations may also be present along with the delusions.

### **6. Predominantly confusional type**

The predominant clinical manifestation is of apparently clouded consciousness, inability to comprehend surroundings, perplexity, apprehensions and is often accompanied with excessive and purposeless activity.

### **7. Predominantly hysterical type**

The predominant clinical manifestation is a markedly demonstrative and histrionic behaviour, usually accompanied with overactivity and restlessness. Non-systematised and short lasting delusions and hallucinations may be present.

### **8. Possession type**

The predominant clinical manifestation is a gross disturbance of behaviour on the patient's part as if he or she is possessed by a spirit, a deity, a living or dead individual. The patient talks, acts and behaves like the "spirit" by whom the patient is allegedly possessed. Delusions of influence, where the patient behaves in an alien way because of his being allegedly influenced and controlled from a distance will not be categorized here.

### **9. Mixed type**

This category will be used when more than one of the above clinical manifestations are present, making it difficult to decide as to which one is predominant. This category is to be listed sparingly.

### **10. Other**

This category will be used when the patient presents with a predominant clinical manifestation not listed above. The rare patients with only hallucinations in any sensory modality, not associated with other symptoms will be listed here.

The above classification will be used for making the initial diagnosis within the first week of observation.

## **C. OPERATIONAL DEFINITION OF REACTIVE PSYCHOSIS**

Each patient would be categorised as being either Reactive Psychosis or non-Reactive Psychosis. The definition of Reactive Psychosis to be used would be as follows:

The psychosis followed upon the occurrence of a clearly defined psychologically

stressful event during a period of one month prior to the onset of the illness; the magnitude of the stress being considered as sufficient to have played a major part in causation of the illness. The content of the symptomatology is understandable in the context of the nature of the stress factor.

A stressful event is one which is a source of intense worry/and/or which requires a major readjustment in his life.

The rating will be made as :

1=Reactive

2=Probably reactive, or

3=Non-Reactive

## APPENDIX VIII

### Reliability Exercise on use of I.C.M.R. Descriptive Diagnostic categories

An intercentre reliability exercise was carried out to evaluate the utility and reliability in the use of the I.C.M.R. diagnostic categories.

Five case summaries were obtained from each of the four centre by the coordinator (20 case summaries in all). The chief investigators and Research Officers were then required to give their opinion as regards the I.C.M.R. diagnosis as well as I.C.D.-9 diagnosis on a total of 15 cases. This included 5 cases emanating from that particular centre plus 10 cases selected at random from those sent by other 3 centres in such a way that each centre had 10 cases in common with every other centre.

The responses from all centres are tabulated in table I For purposes of analysis we have grouped the disagreements into major and minor categories.

For purposes of analysis, in the I.C.M.R. categories a major difference was presumed to exist in case of any disagreement between categories 1 to 8. Disagreement of diagnosis involving categories 9 and 10 within themselves or with any other category was considered minor. Further a disagreement between 7 and 8 was also to be considered a minor one. For I.C.D.-9 diagnosis, a minor difference was presumed in case of disagreement in 1st three digits while 4th digit difference was considered as minor disagreement.

Using these criteria (see table II) we find that in I.C.M.R. diagnosis, there was complete agreement among all the rating centres on major categories in 19 out of 20 cases, there being only two major intercentre disagreements involving only one case.

For the I.C.D.-9 diagnosis, agreement in diagnosis of major categories was present in 16 out of 20 cases, while there were 10 major disagreements involving 4 cases. In addition there were 8 minor disagreements involving 4 cases.

When we compared the total number of intercentre ratings of minor diagnostic categories involving a total of 60 evaluations (each case giving rise to 3 evaluations) we saw that in I.C.M.R. diagnostic categories there were 58 agreements and 2 disagreements while in I.C.D.-9 diagnostic categories there were 50 agreements and 10 disagreements. This difference is statistically significant ( $X^2=5.93$ ,  $p=.01$ ).

However when we compare the intercentre ratings on minor categories, (after excluding 1 case involving major disagreement) we are left with 57 evaluations for I.C.M.R. diagnostic categories. In these, we found a total of 12 disagreements involving 5 cases and with 48 evaluations for I.C.D.-9 diagnosis (excluding the 4 cases of major category disa-

greement) we found a total of 8 disagreements involving 4 cases. This difference is not statistically significant ( $X^2=0.325$ ).

Thus, if we pool the major plus minor disagreements in all the 20 cases, we find some disagreement (major or minor) in 6 cases in I.C.M.R. categories and in 8 cases in I.C.D.-9 categories. This difference is not statistically significant ( $X^2=0.429$ ).

From the above exercise, it can be concluded that there is very high degree of inter-centre reliability in the diagnosis of major I.C.M.R. categories, this being significantly better than in the case of I.C.D.-9 categories. However in the case on minor categories (9th digit disagreement in I.C.D.-9 categories and 9 and 10 item in I.C.M.R. categories. There were approximately equal number of disagreements (approximately one in six and one in five respectively)

Table 1. Tabulated reliability exercises results

Code No.	Case No.	Bikaner		Goal		Vellore			
		ICMR	ICD-9	ICMR	ICD-9	ICMR	ICD-9	ICMR	ICD-9
	P-1	5	295.3	4	295.4	5	295.4		
	P-2	5	295.3			9	295.4	5	295.3
	P-3	1	296.1			1	296.1	1	296.1
	P-4			4	296.0	4	296.0	4	296.0
	P-5	1	296.1	1	296.1	1	296.1		
	V-1	7	298.8						
	P-1	7	298.8	7	298.8	7	298.8	7	298.8
	V-2	7	298.8	7	298.8	7	298.8	7	298.8
	V-3	7	298.8			7	298.8	7	298.8
	V-4	7	298.8	7	298.8			7	298.8
	V-5	7	298.8	7	298.8			7	298.8
	B-1	5	298.4	5	295.3			5	297.2
	B-2	5	298.3	5	295.3			5	298.4
	B-3	1	296.1	1	296.1	1	296.1		
	B-4	7	298.8			7	298.8	7	298.8
	B-5	1	298.0			9	298.3	1	298.0
	G-1			7	298.8	7	298.8	7	298.8
	G-2			1	296.1	1	296.1	1	296.1
	G-3	9	295.4	10	295.4			6	295.4
	G-4	5	295.3	5	291.8	5	298.4		
	G-5	4	298.1	2	296.0	4	296.0		

Table 2. Reliability exercises results—comparisons

Name of the centre	Total cases	ICMR Diagnosis major		Minor different	ICD-9 Diagnosis major		Minor different
		Different	Same		Different	Same	
Bikaner Vs Goal	10	1	9	2	4	6	1
Bikaner Vs Patiala	10	—	10	2	2	8	3
Bikaner Vs Vellore	10	—	10	2	1	9	1
Goa Vs Patiala	10	1	9	1	1	9	—
Goa Vs Gellore	10	—	10	2	2	8	—
Patiala Vs Vellore	10	10	10	3	—	10	3

## APPENDIX IX

### Time table of Activities Check List

	1. Screening Proforma	Name of Investigator
On contact		
In 48 hours :	1. SCAAPS (a) Psychiatric & Social history <input type="checkbox"/> (b) Symptom check list <input type="checkbox"/>	
By 1 weeks :	1. SCAAPPS (a) Diagnostic evaluation <input type="checkbox"/> (b) Narrative Summary <input type="checkbox"/> 2. P.S.E.	
At 6 weeks :	1. SCAAPS (a) Symptom check list <input type="checkbox"/> (b) Diagnostic evaluation <input type="checkbox"/> 2. Follow up Schedule	
At 3 months :	1. SCAAPS <input type="checkbox"/> (a) Symptom check list <input type="checkbox"/> (b) Narrative Summary <input type="checkbox"/> (c) Treatment, Course & outcome <input type="checkbox"/> 2. Follow up Schedule <input type="checkbox"/>	
At 6 months :	1. SCAAPS (a) Symptom check list <input type="checkbox"/> (b) Narrative Summary <input type="checkbox"/> (c) Treatment, course & outcome <input type="checkbox"/> 2. Follow up schedule <input type="checkbox"/>	
At 1 year :	1. SCAAPS (a) Symptom check list <input type="checkbox"/> (b) Diagnostic evaluation <input type="checkbox"/> (b) Treatment, course & outcome <input type="checkbox"/> (d) Narrative summary <input type="checkbox"/> 2. Follow up schedule <input type="checkbox"/> 3. P.S.E.	

NOTE 1. Part C—Symptom check list of SCAAPS to be filled weekly for 6 weeks or till time of discharge, if earlier.

2. Follow up schedule to be completed at each follow up visit of patient in addition to times mentioned above.

## **APPENDIX X**

### **Description of the Catchment Area**

#### **PATIALA CENTRE**

Patiala District is situated at the south-eastern end of Punjab State, with a common border with the adjoining districts of Haryana, viz Ambala and Kurukshetra. The catchment area with a radius of 50 miles would therefore include the whole of the district of Patiala, Sangrur and Ropar, and two blocks of Ludhiana in Punjab plus the districts of Ambala and Kurukshetra in Haryana. The union territory of Chandigarh also falls within this 50 mile zone, but since it is a relatively small town and has a well developed psychiatric facilities, few acute psychotic patients are likely to come from there and hence has been excluded from our study area.

The proposed catchment area covers an area of 22,644 sq. km. with a total population of a little over 50 lakhs as per the 1971 census.

The age group 15 to 60 years constitutes 51.2% of the total population i.e. approximately 26 lakhs in the proposed catchment area. The sex ratio in this population is 1000 : 850. Thus we expect to have approximately 14 lakh males and 12 lakh females in this population on the basis of last year's attendance, it is estimated that we should get at least 70 cases of acute psychosis in 1 year.

#### **VELLORE CENTRE**

An area approximately 50 miles radius around Vellore where Mental Health Centre (the centre of the study) is situated. This will roughly cover the entire district of North Arcot which is one of 14 districts of Tamil Nadu. The main language spoken by the patients will be Tamil. The patients included in the study are likely to have been staying in this area at least for one year. Patients likely to move out of the catchment area will not be included. On the basis of the previous year's attendance it is expected that at least 50 cases of acute psychosis will be available for the study.

#### **BIKANER CENTRE**

P.B.M. Hospital attached to S.P. Medical College, Bikaner is a large 1200 bed teaching hospital, the Psychiatric services are utilized by those living in Bikaner, and a large area covering Ganga Nagar, Churu, Nagpur and Jaisailmer districts of Rajasthan. This large drainage area to this hospital is due to the fact that there is no psychiatric facilities exist within 250 km area around Bikaner.

For the purpose of this study catchment area is defined as many place within 100km radius of Bikaner city. As Bikaner situated at the centre of the boundaries of this district, the catchment area include major-part of Bikaner district and a very small portion of Nagaur district.

The review of attendance and admission to Psychiatric facilities in 3 months period (May 81—July 81) revealed that we would be able to recruit approximately 6-7 patients per month as they could meet the inclusion criterias of this study. Thus in 12 months period we hope to recruit about 70-80 patients in the study. The total population of the catchment area is 8,40,009 and the population density 31 per kmt. 62.6% of population of catchment area live in rural area and remaining in urban area. 27.11% of people are literate, out of the total population of catchment area.

### GOA CENTRE

The catchment area for purposes of the present study would include, the whole of the union territory of Goa, Daman and Diu which falls within the radius of 50 miles from Panaji Goa. Total population of this area is 100, 3141, with a male-female ratio of 1000:974. 57.74% of this population falls in the age group of 15-60 years. On the basis of previous years' attendance, at the Institute of Psychiatry and Human Behaviour and Goa Medical College, Panaji, it is estimated that at least 60 cases of acute psychosis will be available for the study.

Efforts were made at all four centres to contact the General practitioners, private nursing homes and other Psychiatrists working within their catchment area to seek their co-operations to refer all the cases of Acute Psychosis to the centres.



